ORIGINAL ARTICLE

Study of Sociodemographic and Clinical Profile of Admitted Patient Leaving Against Medical Advice from Psychiatry Ward of a Teaching Hospital

[1]Prosenjit Ghosh, [2]Jayanta Kurmi

ABSTRACT

Introduction: Leaving against medical advice (LAMA) meaning a patient choosing to leave the hospital before the treating physician recommends discharge may result into inadequate treatment, relapse and prolonged duration of illness.

Aim and objectives: The aim of this study was to assess the prevalence, reasos for LAMA, sociodemographic variables and clinical profile of such patients.

Materials and methods: Retrospectively data were obtained from indoor register of a Psychiatry department of a teaching hospital for patients opting LAMA, during a period of 18 months from January 2017 up to June 2018. International Classification of Disease (ICD)-10 criteria was used for the diagnosis purpose.

Results: Out of 569 patients admitted during the study period total 60 patients fulfilled the criteria for LAMA. The frequency of LAMA was found to be 10.5%. LAMA was found to be more common in those below age 40 years (85%), in those from non-urban background (75%), who were educated up to high school (71%), who were suffering from neurotic, and psychotic and substance abuse disorders. The commonest reason cited for LAMA was going to faith healer and most of the LAMA occurred within first four days of hospitalization.

Conclusion: Leaving against medical advice (LAMA) is a frequent problem in psychiatric inpatients and is a matter of great concern for the treating doctors.

Keywords: Faith healer, Leaving against medical advice, Substance abuse.

INTRODUCTION

The staffs of the hospital sometimes face patients who refuse to continue the treatment at the hospital and leave hospital against the advice of treating physician (LAMA), or are

[1]Assistant Professor, [2]Postgraduate Trainee

[1,2]Department of Psychiatry, Silchar Medical College, Silchar, Assam, India

Corresponding Author: Prosenjit Ghosh, Assistant Professor, Department of Psychiatry, Silchar Medical College, Silchar, Assam, India, e-mail: p_ghosh72@yahoo.com

discharged against medical advice (DAMA). Leaving the hospital by these patients is a challenge for hospital staff and increases the risk of adverse clinical results. The risk of elevated mortality rates and increased rate of hospital readmission is present in this group of patients. The DAMA continue to be a highly prevalent problem representing upto 2% of all hospital discharges.[1,2] Psychiatrists are concerned more, where the LAMA rates have been found to exceed 20% as opposed to less than 4% for admissions for other medical conditions.[3,4]

The results of a retrospective study, in which 181,516 admitted patients were studied during 2 years, showed that the risk of mortality and readmission among LAMA/DAMA patients is 40% more than patients who complete their treatment period in the hospital.[5] In large hospitals especially for patients with alcohol dependance, other substance dependance, and for the people with mental health problems this rate has been reported to be more than 20%; LAMA/DAMA for public hospitals and small rural hospitals is 4 and 1% respectively.[6]

Several studies have shown that dissatisfaction with the care received, an enhanced sense of well-being,[6] financial problems,[7] lack of access to skilled and qualified physicians, lack of advanced medical services due to lack of essential medical equipment, dissatisfaction with the medical staff, dissatisfaction with the hospital environment, not achieving a satisfactory result from treatment,[8] being young,[9] male gender,[10] drug addiction, alcohol, and mental health problems[11] are important predictors of LAMA/DAMA.

Therefore, the aim of this study was to investigate LAMA in patients admitted in the psychiatry ward of a teaching hospital in India to determine the rate of LAMA and associated predictor factors.

MATERIALS AND METHODS

This retrospective study was conducted at the psychiatry ward of a teaching hospital in India which is a tertiary care hospital with both inpatient and outpatient treatment facilities..

The present retrospective study included data of consecutive patients who left against medical advice between January 1, 2017 and June 30, 2018, i.e., for 18 months, who stayed for more than 24 hours in the hospital. Data were

obtained from the patient files, nursing and minimal residual disease (MRD) records. Ethical approval for this study was taken from medical ethics and scientific research committee of the institute.

Data Collection

The information needed for the study including information related to the patients and the illness (age, sex, marital status, address, duration of stay and provisional diagnosis)as well as the reasons for the LAMA/DAMA were retrieved from the standard performa completed by one of the authors and any doctor-on-duty. To access the variables related to patients, clinical records in the hospital information system were used. In cases where the information was not complete, through contact with patientsusing the phone number in their case record files, the lacking information was collected.

Inclusion Criteria

The inclusion criteria were:
- All admitted patients who left the hospital against medical advice or discharged against medical advice
- Patient must have stayed in the hospital for more than 24 hours.

Exclusion Criteria

Patients or caregivers unwilling to give information regarding reasons for leaving the hospital.

Statistical analysis was done by Statistical Package for Social Sciences (SPSS) version 20.0 and Chi-square test was used to assess the significance. Significance level was set at 0.05.

RESULTS

A total of 66 patients left against advice out of 569 patients admitted for inpatient care between the period July 1st 2017 to 30th June 2018. Out of which two patients left within 24 hours and four patients did not give consent; ultimately the study included 60 patients. LAMA prevalence rate was 10.5%. Most of the patients 53.3 % (N = 32) belonged to age group 21 to 40 followed by age group 01 to 20 (31.7%, N = 19). There was slight Female predominance (55%, N = 33). Most of them were from rural background (58.3%, N = 35) and had done primary level of schooling (33.3%, N = 20). Majority of the patients (66.7%, N = 40) took LAMA between 1 to 4 days of hospital stay. Mean duration of ward stay was 3.97 days. The sociodemographic variables of the sample included in the analysis are shown in Table 1.

Highest number of diagnosis (33.3%, N = 20) was from neurotic and stress related disorder (F40 to 49) group

Table 1: Sociodemographic variables of the sample

Sl. No	Variables	Frequency	Percentage
1.	Age (years)		
	• 01–20 years	• 19	• 31.7
	• 21–40 years	• 32	• 53.3
	• 41–60 years	• 08	• 13.3
	• 61–80 years	• 01	• 1.7
2.	Gender		
	• Male	• 27	• 45
	• Female	• 33	• 55
3.	Religion		
	• Hindu	• 24	• 40
	• Muslim	• 36	• 60
4.	Marital Status		
	• Unmarried	• 28	• 46.7
	• Married	• 28	• 46.7
	• Widow/Widower	• 02	• 3.3
	• Separated/Divorced	• 02	• 3.3
5.	Residence		
	• Rural	• 35	• 58.3
	• Urban	• 15	• 25
	• Semi-Urban	• 10	• 16.7
6.	Educational Status		
	• Illiterate	• 06	• 10
	• Primary	• 20	• 33.3
	• High School	• 17	• 28.3
	• Higher Secondary	• 10	• 16.7
	• Graduate and Others	• 07	• 11.7
7.	Duration of ward stay		
	• 01–04 days	• 66.7	
	• 05–08 days	• 25	
	• 09–12 days	• 6.7	
	• 13–16 days	• 1.7	
8.	Type of admission		
	• Emergency	• 26	
	• Outpatient	• 43.3	

and lowest being organic cases (3.3%, N = 2) excluding others (1.7%, N = 1) which included Mental retardation with behavioral abnormalities (Table 2). The most common diagnosis in the age group 01 to 20 was F40 to 49 (68.4%, N = 13), 37.5% (N = 12) patients in the age group 21 to 40 had problem due to substance use (F10 to 19) and psychotic disorder (F20 to 29) was most prevalent (37.5%, N = 3) in the age group 41 to 60 (Table 2). Total 28.3% (N = 17) patients and their relatives cited going to faith healer as the reason for taking LAMA which was highest in our study sample and 8.3 % (N = 5) patients couldn't specify the reason for LAMA (Table 3).

In females most common diagnosis was F40-49 (51.5%, N = 17) followed by F20 to 29 (33.3%, N = 11) whereas in males Disorders due to psychoactive substance use were most common (48.1%, N = 13). Psychotic and mood related disorders were equally prevalent in males (18.5%, N = 5). In Muslim patients most common diagnosis was F40 to 49 (41.7%, N = 15) whereas in

Hindus F20 to 29 and F10 to 19 were equally prevalent among both (29.2%, N = 7). The association between age and diagnosis was found statistically significant

Table 2: Diagnosis of the patients

Sl. No	Diagnostic spectrum	Frequency	Percentage
1.	Organic (F00–F09)	2	3.3
2.	Substance use disorders (F10–F19)	13	21.7
3.	Psychotic disorders (F20–29)	16	26.7
4.	Mood disorders (F30–39)	8	13.3
5.	Neurotic, Stress related disorders (F40–49)	20	33.3
6.	Others	1	1.7
	Total	60	100.0

Table 3: List of reasons for taking LAMA

Sl. No	Reasons for taking LAMA	Frequency	Percentage
1.	Pressing family issues	10	16.7
2.	Couldn't specify	5	8.3
3.	Dissatisfaction with the physician	6	10.0
4.	Going to other centres	8	13.3
5.	Tired from treatment	5	8.3
6.	Faith healer	17	28.3
7.	Financial issues	9	15.0
	Total	60	100.0

($p < 0.027$) (Table 4). The association between gender and diagnosis was found statistically significant ($p < 0.000$), (Table 4).

Among the patients taking LAMA between 01-04 days of hospitalization, F40 to 49 was the most common diagnosis (47.5%, N=19) and F20 to 29 (40%, N = 6) were most common in patients who took LAMA between 5 to 8 days. However the association between duration of ward stay and diagnosis was statistically not significant ($p = 0.334$).

Going to faith healer was the most common reason for LAMA across all age group and gender. All organic cases cited going to other centre (100%, N = 2) as reason for LAMA and also it was the most common (62.5%, N = 5) reason for the same in patients with diagnosis F10 to 19. Pressing family issues was the most common reason (50%, N = 5) for LAMA in patients with diagnosis F20-29. Going to faith healer was the most common reason for LAMA in patients with F30 to 39 (23.5%, N = 4) and in F40 to 49 (52.9%, N = 9), (Table 3). The association between diagnosis and reasons for taking LAMA was found statistically significant ($p < 0.008$) (Table 5).

DISCUSSION

Despite the widespread nature of this problem, there has been little research evaluating incidence, demographic and clinical predictors of patients with DAMA/LAMA. Past studies evaluated the phenomenon of LAMA in patients

Table 4: Association between age group, gender and diagnosis

		Diagnosis						
		F00–F09	F10–19	F20–29	F30–39	F40–49	Others	p-value
Age Group	01–20 years	1	0	5	0	13	0	
	21–40 years	1	12	8	6	4	1	< 0.027
	41–60 years	0	1	3	2	2	0	
	61–80 years	0	0	0	0	1	0	
Sex	Male	0	13	5	5	3	1	< 0.000
	Female	2	0	11	3	17	0	

Table 5: Association between diagnosis and reasons for LAMA

		Reasons for taking LAMA							
		Pressing family issues N = 10	Couldn't specify N = 5	Dissatisfaction with the physician N = 6	Going to other centres N = 8	Tired from treatment N = 5	Faith healer N = 17	Financial issues N = 9	p-value
Diagnosis	F00 to F09, N = 2	0	0	0	N=8	N=5	0	0	
	F10 to 19, N = 13	1	2	2	5	3	0	0	
	F20 to 29, N = 16	5	1	0	1	2	4	3	< 0.008
	F30 to 39, N = 8	1	0	1	0	0	4	2	
	F40 to 49, N = 20	3	2	3	0	0	9	3	
	Others, N = 1	0	0	0	0	0	0	1	

admitted in–emergency department, medicine department, orthopedic department, critical care unit and drug de-addiction service,[5,12,13] etc. But we did not come across any study evaluating the predictors of LAMA in psychiatric inpatient of a teaching hospital in this part of the country.

Leaving against medical advice (LAMA) has been defined as any patient who insists upon leaving against the expressed advice of the treating team. The incidence varied depending upon patient population and type of treatment setting. Report of LAMA incidence is widely variable ranging between > 20% in large urban hospitals, especially among alcohol dependence patients, drug abusers and psychiatric patients, to <4% for medical admission and < 1% in small rural hospitals and medical wards .[4,6,14,15]

Hayat et al. in a study from Pakistan reported a rate of 39% of LAMA amongst the inpatients of a psychiatric hospital.[16] Brook et al.[17] in a comprehensive review of literature on LAMA among psychiatric inpatients reported the prevalence of LAMA in the range of 3 to 51% with a mean of 17% and increasing with time. Our study found a prevalence of 10.5% which is almost similar to the reported findings of Sarkar et al.[18] in a study from north India among substance dependent subjects (10.1%).

It is very important to understand why patients choose to leave the hospital against advice because of the potential to identify those at higher risk and therefore intervene earlier to prevent excess morbidity and mortality.[19] However, the following correlates of LAMA discharge have had reasonably consistent results over time: lower socioeconomic class, male sex, younger age, geographic reasons and substance abuse.[20-27]

Brook et al.[17] in a review of 61 articles over a period of last fifty years reported significant predictors of discharge against medical advice. The predictors fell into two broad categories:

(a) *Patient variables:* Sociodemographic characteristics, diagnosis, treatment history, and
(b) *Provider variables:* Hospital setting and structure, staffing patterns, admission and discharge policies, and psychiatrists' clinical style and experience.

Patient Variables

Age

Various studies reported that patients were significantly younger than individuals in a control group or the overall hospital population.[21,23,28] In our study, 85% subjects were below forty years of age. Hyat et al.[16] also reported similar findings in a study on LAMA subjects from a psychiatric hospital, where the mean age of the subjects was 33 years.

Gender

Brook et al. reported that findings regarding gender were mixed, with studies reporting both male gender[29-32] and female gender[27,33,34] as being predictive. We found slight female preponderance.

Marital Status

Brook et al. in the review of the LAMA subjects found mixed results on marital status with studies citing both unmarried [25,26,29,30] and married [27,29,33,35] status as predictive of discharge against medical advice. We found that majority of our subjects (54%) were either unmarried or separated. This may be due to the fact that majority of our patients were below forty years of age.

Educational Status

Almost two third (71%) of our subjects were under matric. Hyat et al. reported almost similar findings. In a study on LAMA at a psychiatric hospital in Pakistan the authors reported that 73% of the LAMA subjects were under matric.

Illness Variables

Duration of Stay

In our study, forty subjects (67%) took LAMA within four days of admission. Various studies noted that discharges against medical advice tended to occur within the initial critical therapeutic period when treatments were being initiated.[28,30,33,36-39] In a study from pakistan Aalia Hyat et al.[16] reported that 51% of subjects left against medical advice within first week of admission. Some studies reported that evening or night shift to be significantly associated with LAMA. We did not find any such trends.

Diagnosis

Studies examining diagnostic factors found that the presence of comorbid substance use disorder increased the likelihood of discharge against medical advice. [29,39,40,41,42]. other axis I diagnoses predictive of discharge against medical advice included psychotic[30,40] and depressive[33] disorders. The findings of our study are consistent with earlier reports except that in our subjects the neurotic disorders (33%) were the commonest diagnosis followed by psychotic disorders (27%) and substance abuse disorders (21%).

There was a statistically significant difference in the diagnosis across the age groups of LAMA subjects. In the adolescent and early adult group the predominant diagnosis was neurotic or stress related disorders whereas substance abuse disorder was the commonest diagnosis

IJPP

Study of Sociodemographic and Clinical Profile of Admitted Patient Leaving Against Medical Advice from Psychiatry Ward

in the middle adult age group (21 to 40 years). Substance abuse disorder is usually less prevalent in extreme of ages; Sarkar et al.[18] reported that majority of LAMA subjects with substance abuse were in their thirties. So our study confirms the earlier findings.

Type of Admission

Studies examining the type and context of the index admission found that patients discharged against medical advice were more likely to have been admitted through crisis,[30,43] involuntarily,[44] or under pressure from family or courts.[24] On the contrary, other studies linked voluntary self-admission without pressure to discharge against medical advice.[23,42] In a regional study by Syed done at university hospital in Pakistan and by Shirani in Tehran[45] frequency of LAMA amongst patients admitted through emergency was quite high. Similar results were revealed through this study too where 57% of the LAMA subjects were admitted through emergency department.

Substance Abuse

We found a statistically significant association (p < 0.000) between gender and the clinical diagnosis of LAMA subjects. In the female subjects stress related disorders was commonest whereas in male the commonest diagnosis was Substance abuse. None of the female subjects had substance abuse disorder, this may be explained by the socio-cultural background of our patients who were mostly from rural or semi urban background and consumption of alcohol by females is considered a taboo. Sarkar et al.[18] in a study of LAMA also reported that out of 942 drug dependent patients leaving against medical advice only 6 (6%) were female.

Provider Variables

Location of Hospital

Franks et al. found that hospital risk factors for LAMA included location of hospital in large urban areas.[4] The hospital in which this study is conducted also falls under this domain and, therefore, higher rates of LAMA are found in this study affirming this finding.

Among variables attributable to providers, studies cited failure to orient the inpatient to treatment on intake,[46] a punitive or threatening atmosphere on the inpatient unit,[47] and difficulties in doctor-patient relationship.[46,48,49] In our study, approximately quarter of LAMA subjects (23%) reported dissatisfaction with physician or the hospital (going to other centre) as reason for leaving against advice.

Reason for Taking LAMA

We found that the most common reason cited for leaving against medical advice was going to faith healer (28.3%). This may reflect the prevailing cultural/religious belief systems of our subjects. We propose that as majority of our subjects are from non-urban (75%) background and are semiliterate (71%); the effect of sociocultural and religious factors influence their treatment seeking behavior. It should also be kept in mind that the faith healers are located to close proximity of the residence of the patients and the treatment is comparatively cheaper. However there was a statistically significant difference in the most common reason given by the subjects in various diagnostic groups. This is a new finding of our study.

There was a statistically significant difference in the reasons for LAMA across the various diagnostic groups (p < 0.008). The most common reason cited by the substance abuse and organic groups was going to higher centers. The probable explanation may be that our set up was a part of general hospital without having any dedicated neurology or deaddiction ward.

Earlier studies indicated that patients LAMA for reasons like dissatisfaction with their care, need to take care of personal, family or financial affairs, patients are not improving, preference for another hospital, beliefs that the condition was terminal, dislike of the hospital environment or for financial difficulties.[50] Our subjects also cited almost similar reasons for leaving against advice.

The findings of our study should be interpreted in light of strengths and weaknesses. The strengths of the study include consecutive patient data from a fairly large sample. The limitations of the study were the personality profile was not assessed, we did not evaluate the past history of psychiatric illness/history of LAMA, we did not follow-up the LAMA subjects to find the outcome, retrospective chart based study and single centre study.

CONCLUSION

Leaving against medical advice in psychiatric inpatients was quite high, the sociocultural belief might influence treatment seeking behavior, better communication skills of treating psychiatrist is important in establishing a positive doctor/patient relationship and majority of the patients leave against medical advice within first week admission. Our study throws some light into the predictors and prevalence of LAMA among psychiatric inpatients of a general hospital psychiatry ward. Future multi centre studies with follow up of LAMA subjects may help the policymakers to reduce the rate of LAMA which is associated with significant morbidity and mortality.

REFERENCES

1. Schaefer GR, Matus H, Schumann JH, Sauter K, Vekhter B, Meltzer DO, Arora VM. Financial responsibility of hospitalized patients who left against medical advice: medical urban legend?. Journal of general internal medicine. 2012 Jul 1;27(7):825-830.

2. Ibrahim SA, Kwoh CK, Krishnan E. Factors associated with patients who leave acute-care hospitals against medical advice. American journal of public health. 2007 Dec;97(12):2204-2208.

3. Levine LJ, Schwarz DF, Argon J, Mandell DS, Feudtner C. Discharge disposition of adolescents admitted to medical hospitals after attempting suicide. Archives of pediatrics & adolescent medicine. 2005 Sep 1;159(9):860-866.

4. Franks P, Meldrum S, Fiscella K. Discharges against medical advice: are race/ethnicity predictors?. Journal of general internal medicine. 2006 Sep 1;21(9):955-960.

5. Fiscella K, Meldrum S, Barnett S. Hospital discharge against advice after myocardial infarction: deaths and readmissions. The American journal of medicine. 2007 Dec 1;120(12):1047-1053.

6. Al Ayed I. What makes patients leave against medical advice?. Journal of Taibah University Medical Sciences. 2009 Jan 1;4(1):16-22.

7. Okoromah CN, Egri-Qkwaji MT. Profile of and control measures for paediatric discharges against medical advice. The Nigerian postgraduate medical journal. 2004 Mar;11(1):21-25.

8. Eze B, Agu K, Nwosu J. Discharge against medical advice at a tertiary center in southeastern Nigeria: sociodemographic and clinical dimensions. Patient Intelligence. 2010 Mar 1;2: 27-31.

9. 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 Mar 1;40(2):124-32.

10. Alfandre DJ. "I'm going home": discharges against medical advice. InMayo Clinic Proceedings 2009 Mar 1 (Vol. 84, No. 3, pp. 255-260). Elsevier.

11. Youssef A. Factors associated with discharge against medical advice in a Saudi teaching hospital. Journal of Taibah University Medical Sciences. 2012 Aug 1;7(1):13-18.

12. Moyse HS, Osmun WE. Discharges against medical advice: a community hospital's experience. Can J Rural Med. 2004 Jul 1;9(3):148-153.

13. Baptist AP, Warrier 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 Apr 1;119(4):924-929.

14. Jeffer EK. Against medical advice: Part I, a review of the literature. Military medicine. 1993 Feb 1;158(2):69-73.

15. Jeffer EK. Against medical advice: part II, The Army experience 1971–1988. Military medicine. 1993 Feb 1;158(2):73-76.

16. Hayat AA, Ahmed MM, Minhas FA. Patients leaving against medical advice: an inpatient psychiatric hospital-based study. J Coll Physicians Surg Pak. 2013 May 1;23(5):342-346.

17. Brook M, Hilty DM, Liu W, Hu R, Frye MA. Discharge against medical advice from inpatient psychiatric treatment: a literature review. Psychiatric services. 2006 Aug;57(8):1192-1198.

18. Sarkar S, Balhara YP, Gautam N, Singh J. A retrospective chart review of treatment completers versus noncompleters among in-patients at a tertiary care drug dependence treatment centre in India. Indian journal of psychological medicine. 2016 Jul;38(4):296-301.

19. Alfandre DJ. "I'm going home": discharges against medical advice. InMayo Clinic Proceedings 2009 Mar 1 (Vol. 84, No. 3, pp. 255-260). Elsevier.

20. Karimi SA, Saravi BM, Farahabbadi EB, Zamanfar D, Fallah M, Abokheily MA. Studying the rate and causes of discharge against medical advice in hospitals affiliated to mazandaran university of medical sciences. Materia socio-medica. 2014 Jun;26(3):203-207.

21. Greenberg WM, Otero J, Villanueva L. Irregular discharges from a dual diagnosis unit. The American journal of drug and alcohol abuse. 1994 Jan 1;20(3):355-371.

22. Baekeland F, Lundwall L. Dropping out of treatment: a critical review. Psychological bulletin. 1975 Sep;82(5):738-783.

23. Beck NC, Shekim W, Fraps C, Borgmeyer A, Witt A. Prediction of discharges against medical advice from an alcohol and drug misuse treatment program. Journal of Studies on Alcohol. 1983 Jan;44(1):171-180.

24. Fabrick AL, Ruffin JW, Denman SB. Characteristics of patients discharged against medical advice. Mental hygiene. 1968 Jan;52(1):124-128.

25. Tehrani E, Krussel J, Borg L, Munk-Jorgensen P. Dropping out of psychiatric treatment: a prospective study of a first-admission cohort. Acta Psychiatrica Scandinavica. 1996 Oct;94(4):266-271.

26. Pages KP, Russo JE, Wingerson DK, Ries RK, Roy-Byrne PP, Cowley DS. Predictors and outcome of discharge against medical advice from the psychiatric units of a general hospital. Psychiatric Services. 1998 Sep;49(9):1187-1192.

27. Tuckman J, Lavell M. Psychiatric patients discharged with or against medical advice. Journal of clinical psychology. 1962 Apr;18(2):177-180.

28. Atkinson RM. AMA and AWOL discharges: a six-year comparative study. Psychiatric Services. 1971 Oct;22(10): 293-296.

29. Heinssen RK, McGlashan TH. Predicting hospital discharge status for patients with schizophrenia, schizoaffective disorder, borderline personality disorder, and unipolar affective disorder. Archives of general psychiatry. 1988 Apr 1;45(4): 353-360.

30. Phillips MS, Ali H. Psychiatrie Patients who Discharge Themselves against Medical Advice. The Canadian Journal of Psychiatry. 1983 Apr;28(3):202-205.

31. Senior N, Kibbee P. Can we predict the patient who leaves against medical advice: The search for a method. Psychiatric Hospital. 1986;17:33-36.

32. Wylie CM, Michelson RB. Age contrasts in self-discharge from general hospitals. Hospital formulary. 1980 Apr;15(4):273-276.

33. Brush RW, Kaelbling R. Discharge of psychiatric patients against medical advice. The Journal of nervous and mental disease. 1963 Mar 1;136(3):288-292.

34. Johnson DT, Beutler LE, Neville CW. Effects of therapist sex, patient sex, and time on rates of discharge of psychiatric inpatients against medical advice (abstract). Catalog of Selected Documents in Psychology. 1978;8:88.

35. LaWall JS, Jones R. Discharges from a ward against medical advice: search for a profile. Psychiatric Services. 1980 Jun;31(6):415-416.

36. Kecmanovic D. Patients discharged against medical advice from a lock-and-key psychiatric institution. International Journal of Social Psychiatry. 1975 Dec;21(4):274-281.

37. Raynes AE, Patch VD. Distinguishing features of patients who discharge themselves from psychiatric ward. Comprehensive Psychiatry. 1971 Sep;12:473-479.

38. Long JP, Marin A. Profile of patients signing against medical advice. The Journal of family practice. 1982 Sep;15:551-552.

39. Chandrasena R. Premature discharges: a comparative study. The Canadian Journal of Psychiatry. 1987 May;32(4):259-263.

40. Planansky K, Johnston R. A survey of patients leaving a mental hospital against medical advice. Psychiatric Services. 1976 Dec;27(12):865-868.

41. Akhtar S, Helfrich J, Mestayer RF. AMA discharge from a psychiatric inpatient unit. International Journal of Social Psychiatry. 1981 Jun;27(2):143-147.

42. Chandrasena RD, Miller WC. Discharges AMA and AWOL: a new" revolving door syndrome.". Psychiatric journal of the University of Ottawa. 1988 Sep;13:154-157.

43. Syed EU, Mehmud S, Atiq R. Clinical and demographic characteristics of psychiatric inpatients admitted via emergency and non-emergency routes at a university hospital in Pakistan. Journal-Pakistan Medical Association. 2002 Oct;52(10):456-458.

44. Tessier WG. The impact of ward atmosphere on patient discharge status from locked psychiatric units. Dissertation Abstracts International. 1990;50:3178.

45. Shirani F, Jalili M, Asl-e-Soleimani H. Discharge against medical advice from emergency department: results from a tertiary care hospital in Tehran, Iran. European Journal of emergency medicine. 2010 Dec 1;17(6):318-321.

46. Greenwald AF. Some contributive factors in psychiatric discharges against medical advice. Psychiatry Digest.1963;24: 21-26.

47. Daniels RS, Margolis PM, Carson RC. Hospital discharges against medical advice: I. Origin and prevention. Archives of general psychiatry. 1963 Feb 1;8(2):120-30.

48. Lewis JM. Discharge against medical advice: The doctor's role. Psychiatric Services. 1966 Sep;17(9):266-270.

49. Laurttsen R, Frus S. Self-rated therapeutic alliance as a predictor of drop-out from a day treatment program. Nordic Journal of Psychiatry. 1996 Jan 1;50(1):17-20.

50. Alebiosu CO, Raimi TH. Discharge against medical advice. Tropical Doctor 2003;33:191-192.