OPEN ACCESS
Saudi Journal of Nursing and Health Care
Abbreviated Key Title: Saudi J Nurs Health Care
ISSN 2616-7921 (Print) |ISSN 2616-6186 (Online)
Scholars Middle East Publishers, Dubai, United Arab Emirates
Journal homepage: https://saudijournals.com

Original Research Article

Discharge Against Medical Advice (DAMA) Among Inpatients with Cardiac Problems in CCH

Mohammed Sayel Hammad Alshammari, RN, MAN[1*], Rechel Mates, RN[1], Tahani Madyn Hakem Alshammari, RN[1], Najah Sayal Hammad Alshammari, RN[1]

[1]Cardiac Nursing Administration, Cardiac Center Hail (CCH), Ha'il, Kingdom of Saudi Arabia; Hail Health Cluster, Ha'il, Kingdom of Saudi Arabia; Diabetic Center – King Salman Specialist Hospital, Ha'il, Kingdom of Saudi Arabia

DOI: 10.36348/sjnhc.2022.v05i10.006 | **Received:** 12.09.2022 | **Accepted:** 15.10.2022 | **Published:** 20.10.2022

***Corresponding author:** Mohammed Sayel Hamad Alshammari
Cardiac Nursing Administration, Cardiac Center Hail (CCH), Ha'il, Kingdom of Saudi Arabia; Hail Health Cluster, Ha'il, Kingdom of Saudi Arabia; Diabetic Center – King Salman Specialist Hospital, Ha'il, Kingdom of Saudi Arabia

Abstract

Background*:** The instance of a patient already in hospital wishing to leave against clinician's advice is referred to as self-discharge or discharge against medical advice. DAMA is a relatively common problem in health care systems. Because lengths of stay (LOS) are commonly several days, these patients often remain acutely ill at the time of self-discharge, and they may remain exposed to the risk of inappropriately treated medical problem, resulting in the need for readmission. It is not surprising that DAMA poses a major problem for many clinicians who treat inpatients, particularly those with cardiac problems because incomplete therapy in conditions such as ischemic heart disease may exert a negative impact on health outcome. Additionally, consequent care will be probably associated with more challenges and higher overall costs over time. Avoiding DAMA is, thus, likely to be beneficial for both patients and health systems. ***Methods*:** *Study Design* -Non-experimental, cross-sectional research design which will identify the reasons influencing DAMA among inpatients with cardiac problems is CCH. The study will describe the reasons by using a quantitative method. *Setting of the study* - The research will be conducted in Cardiac Center Hail, Ha'il Region, Kingdom of Saudi Arabia, and will focus on inpatient departments. *Sample* - In order to get accurate result of study, all discharged patients will be asked to participate in this study optionally. *Data collection procedures* - After getting approval from ethical committee in CCH and Hail Health Cluster, the questionnaires will be kept in nursing station, and explanation of a purpose of study will be demonstrated to all participants. Then, a collection box of questionnaires will be provided in the nursing office. Thereafter, data will be stored within one week from distribution to be ready for analysis. *Data analysis* - The 'Patient Satisfaction Survey - DAMA form' was designed on the basis of the reasons cited by patients in the past for self-discharge and the potential reasons are provided in this form. Demographic information was comprised of such biological characteristics as age, gender, and nationality. Finally, the prospectively collected data were analysed. The data are presented as n = % for the quantitative variables and are summarized by absolute frequencies and percentages for the categorical variables. ***Results*:** For approximately 45-day period, there were 102 discharges, of which 19 (18.63%) were cases of DAMA. Analysis was conducted in 17 patients after the exclusion of 2 patients due to missing data. Modes of admission were the emergency department, hospital transfer, and routine or elective admissions. The most prevalent reason cited by the study was feeling well (88.24%), followed by the desire to be transferred to other hospital (5.88%) and financial problems (5.88%). The baseline characteristics of the DAMA cases, for male and female separately, are depicted in Table 1. The range age of study population is above 18 to over 60 years with a male to female ratio of 16:1. Nearly one third of the study patients were in the age group of 51-60 years. The most common age group was 51-60 years in the men and over 60 years in the women. ***Conclusion: The most frequent self-reported reasons for DAMA in inpatient cardiac patients included feeling well, desire to be transferred to another hospital and financial problems respectively. We believe that explaining the importance of proper medical treatment and benefits versus risks of medication compliance may lessen impulsive decision of DAMA. Providing strategies for decreasing the rate of DAMA by analysing the current circumstances and developing effective interventions may benefit both patients (improving their health) and health care systems (decreasing unnecessary readmissions). There will be a continuous monitoring of the patient satisfaction survey both in regular and monthly basis by the Nursing Service Department. Proper coordination with social health workers, medical and nursing staff will be done. Multidisciplinary collaboration through regular committee meetings shall be implemented.

Keywords: Discharge Against Medical Advice, Cardiac Patients, Cardiac Center.

INTRODUCTION

The instance of a patient already in hospital wishing to leave against clinician's advice is referred to as self-discharge or discharge against medical advice. DAMA is a relatively common problem in health care systems. Because lengths of stay (LOS) are commonly several days, these patients often remain acutely ill at the time of self-discharge, and they may remain exposed to the risk of inappropriately treated medical problem, resulting in the need for readmission. It is not surprising that DAMA poses a major problem for many clinicians who treat inpatients, particularly those with cardiac problems because incomplete therapy in conditions such as ischemic heart disease may exert a negative impact on health outcome. Additionally, consequent care will be probably associated with more challenges and higher overall costs over time. Avoiding DAMA is, thus, likely to be beneficial for both patients and health systems.

DAMA occurs for a variety of reasons. A good understanding of patients' reasons for DAMA may assist health care providers in preventing some of these premature discharges. Patients' consideration of DAMA may be influenced by race/ethnicity and cultural factors or other contextual factors, including differences in the health care system, relationship between primary care physicians and hospital-based physicians, insurance coverage, and styles of communication between physicians and patients. While there are several studies available from dominantly western countries regarding the prevalence of DAMA, to the best of our knowledge, we therefore, sought to determine the prevalence of and also the reasons for DAMA in our Cardiac Center here in Hail.

PROBLEM STATEMENT

In Healthcare industry, the patient's perception of quality of service positively influences patient satisfaction, which in turn influences choice of healthcare provider and when the patient is dissatisfied with the care provided it leads to Discharge Against Medical Advice.

SIGNIFICANCE OF THE STUDY

The purpose of this study is to identify the reasons for Discharge Against Medical Advice (DAMA). Furthermore, this study intends to find out the factors influencing the patient satisfaction in terms of Discharge Against Medical Advice.

AIMS

a. To gather information related to the prevalence of DAMA patients.
b. To decrease the number of DAMA patients in patient care areas.
c. To emphasize the importance of patient's satisfaction in health care setting.
d. To develop more strategies to decrease the number of DAMA in the center.
e. To ensure patient and staff satisfaction and lessen impulsive decision of DAMA.

RESEARCH QUESTIONS

To achieve the aims of the study, the following questions should be answered:

Q1 – What are the reasons for DAMA in Cardiac Center Hail?

Q2 – What is the prevalence of DAMA in Cardiac Center Hail?

REVIEW OF LITERATURE

DAMA or self-discharge has been reported in most of healthcare management documents. There are many reasons for DAMA, namely dissatisfaction with hospital services, patient or his/her parent's addiction or misuse of medications, patient's unaffordability to pay hospital expenses, psychiatric problems, family problems (e.g. having a child in home), lack of significant improvement in medical conditions, believe in traditional medicine, long stay in hospital, and patient's place of residence (urban or rural). Other studies have also shown that personal and family problems, feeling better to leave the hospital, dissatisfaction with treatment, dullness, boringness and tediousness of medical environment are among other causes of DAMA.

Understanding the nature of admissions where patients leave against medical advice is important to finding appropriate solutions, targeted to minimize the resulting effects of these discharges. DAMA negatively impacts treatment outcomes, healthcare resource utilization and exposes the clinician and healthcare administrators to the hazard of litigations. Furthermore, DAMA is associated with higher readmission rates for the same or related morbidity and higher long-term financial cost of medical care. Given lower levels of trust, partnership, and communication between minority patients reflect worse communication and lower trust between physicians and their minority patients.

Existing findings regarding the role of race and ethnicity in DAMA are limited by small sample sizes, single hospital or single disease studies, and inadequate adjustment for comorbidity and cofounders, particularly hospital characteristics. Retrospective studies show that a history of DAMA increases the recurrence of such discharges and consent withdrawal due to repeated interactions in the hospital. The risk of DAMA in a current hospital admission is 10 times higher than that of the comparator group having a prior admission ended in such a discharge after controlling for the number of previous hospital admissions. DAMA is of big concern and a challenge for individuals in the health care field in settings like India where there is almost no health insurance, it is noticed that the parents, after initially

admitting their sick children, request for DAMA, which results in loss of resources from the patient's as well as hospital's perspective and also potentially deprives some other patient from receiving hospital care.

Until today not many literature has prospectively studied the impact DAMA on future rates of treatment refusal; thereby, understanding patient's reason to leave the hospital has been not determined in various region and obviously it is most important because that still population in many of such region are at higher risk. So the need arises to study against medical advice discharges which involve complex matters. The purpose of the study is to identify the complex reasons for DAMA and to find the strategies to reduce the same. Further this study finds out the major diagnostic categories in terms of discharge against medical advice.

METHODOLOGY

This study will be conducted for approximately 45-day period at Cardiac Center Hail, a major referral hospital dedicated to cardiac patients and affiliated to King Salman Specialist Hospital. Cardiac Center at Hail comprises of Cardiac Ward: Medical and Surgical (20 beds), Coronary Care Unit (10 beds), and Cardiac ICU (4 beds) and with full-time accomplished specialists, well-trained nurses, and state-of-the-art diagnostic and therapeutic equipment. The center provides diagnostic and treatment services throughout the region of Hail. Coronary Angiogram (CAG), Cardiac Surgery procedures (Coronary Artery Bypass Grafting and Valve Surgeries) and Percutaneous Coronary Intervention (PCI) procedures are performed in our center.

Study Design

Non-experimental, cross-sectional research design which will identify the reasons influencing DAMA among inpatients with cardiac problems is CCH. The study will describe the reasons by using a quantitative method.

Setting of the study

The research will be conducted in Cardiac Center Hail, Ha'il Region, Kingdom of Saudi Arabia, and will focus on inpatient departments.

Sample

In order to get accurate result of study, all discharged patients will be asked to participate in this study optionally.

Tools of data collection

A patient satisfaction survey form will be used to collect data from participants as a primary source of data.

Data collection procedures

After getting approval from ethical committee in CCH and Hail Health Cluster, the questionnaires will be kept in nursing station, and explanation of a purpose of study will be demonstrated to all participants. Then, a collection box of questionnaires will be provided in the nursing office. Thereafter, data will be stored within one week from distribution to be ready for analysis.

Data analysis

According to the policies of Cardiac Center Hail, a request for DAMA is considered only when a related form is completed and signed by the patient or his/her legal guardian. The 'Patient Satisfaction Survey - DAMA form' was designed on the basis of the reasons cited by patients in the past for self-discharge and the potential reasons are provided in this form. A list of reasons provided including feeling well, financial problems, personal or family issues, desire to be transferred to another hospital, no noticeable improvements, requesting temporary leave from hospital stay during public or extended holidays, dissatisfaction with hospital services or facilities, seeking consultation elsewhere, delay in delivery of health care services, dissatisfaction with the staff's behaviour.

Demographic information was comprised of such biological characteristics as age, gender, and nationality. Finally, the prospectively collected data were analysed. The data are presented as n = % for the quantitative variables and are summarized by absolute frequencies and percentages for the categorical variables.

Ethics and human subject protection

All ethical consideration will be followed. Confidentiality and anonymous of participants will be guaranteed. All potential risk will be identified for the participants.

An explanatory statement will be attached to each questionnaire to identify a purpose of study. As well, participants' rights will be explained as they have the right to withdraw from a study at any time.

RESULTS AND DISCUSSION

Patient Survey

For approximately 45-day period, there were 102 discharges, of which 19 (18.63%) were cases of DAMA. Analysis was conducted in 17 patients after the exclusion of 2 patients due to missing data. Modes of admission were the emergency department, hospital transfer, and routine or elective admissions. The most prevalent reason cited by the study was feeling well (88.24%), followed by the desire to be transferred to other hospital (5.88%) and financial problems (5.88%).

The baseline characteristics of the DAMA cases, for male and female separately, are depicted in Table 1. The range age of study population is above 18 to over 60 years with a male to female ratio of 16:1. Nearly one third of the study patients were in the age

group of 51-60 years. The most common age group was 51-60 years in the men and over 60 years in the women.

RESULTS

a. There is an active participation among social health care workers, medical and nursing staff during health teachings.
b. There is lesser number of DAMA patients in the month of September 2022 as per Daily Census.
c. Emphasis on the importance of proper health teachings to medical and nursing staff has been noted.
d. Patient Family Education forms have been utilized properly.
e. Increase interest of staff to quality improvement has been noted.

Table 1: Baseline characteristics of the study population stratified by gender

Age	All (n=17)	Male (n=16)	Female (n=1)
18-30	2 (11.76)	2 (12.5)	
31-40	3 (17.65)	3 (18.75)	
41-50	2 (11.76)	2 (12.5)	
51-60	7 (41.18)	7 (43.75)	
over 60	3 (17.65)	2 (12.5)	1 (100)
Nationality			
Saudi	15 (88.26)	14 (87.5)	1 (100)
Non-Saudi	2 (11.76)	2 (12.5)	

*n = % (Total number of DAMA hospitalized cardiac patients)

Table 2: Self-reported reasons by the 17 hospitalized cardiac patients for leaving the hospital against medical advice

REASONS	All (n=17)	Male (n=16)	Female (n=1)
Feeling well	15 (88.24)	14 (87.5)	1 (100)
Financial problems	1 (5.88)	1 (6.25)	
Personal or family issues	0		
Desire to be transferred to another hospital	1 (5.88)	1 (6.25)	
No noticeable improvements	0		
Requesting temporary leave from hospital stay during public or extended holidays	0		
Dissatisfaction with hospital services or facilities	0		
Seeking consultation elsewhere	0		
Delay in delivery of health care services	0		
Dissatisfaction with the staff's behaviour	0		

*n = % (Total number of DAMA hospitalized cardiac patients).

CONCLUSION

The most frequent self-reported reasons for DAMA in inpatient cardiac patients included feeling well, desire to be transferred to another hospital and financial problems respectively. We believe that explaining the importance of proper medical treatment and benefits versus risks of medication compliance may lessen impulsive decision of DAMA. Providing strategies for decreasing the rate of DAMA by analysing the current circumstances and developing effective interventions may benefit both patients (improving their health) and health care systems (decreasing unnecessary readmissions). There will be a continuous monitoring of the patient satisfaction survey both in regular and monthly basis by the Nursing Service Department. Proper coordination with social health workers, medical and nursing staff will be done. Multidisciplinary collaboration through regular committee meetings shall be implemented.

ACKNOWLEDGEMENT

This study was supported by Cardiac Center Hail affiliated to King Salman Specialist Hospital. We wish to thank the Cardiac Ward data base group for its support. Also, we are grateful to all the nursing staffs of Cardiac Center Hail and the Hail Health Cluster – Local Committee for *Bioethics Research* for the efforts and contribution on this research.

REFERENCES

- Alfandre, D. J. (2009, March). "I'm going home": discharges against medical advice. In *Mayo Clinic Proceedings* (Vol. 84, No. 3, pp. 255-260). Elsevier.
- Saitz, R., Ghali, W. A., & Moskowitz, M. A. (1999). Characteristics of patients with pneumonia who are discharged from hospitals against medical advice. *The American journal of medicine*, *107*(5), 507-509.

- Dalrymple, A. J., & Fata, M. (1993). Cross-validating factors associated with discharges against medical advice. *The Canadian Journal of Psychiatry*, *38*(4), 285-289.
- Stoep, A. V., Bohn, P., & Melville, E. (1991). A model for predicting discharge against medical advice from adolescent residential treatment. *Psychiatric Services*, *42*(7), 725-728.
- Stern, T. W., Silverman, B. C., Smith, F. A., & Stern, T. A. (2011). Prior discharges against medical advice and withdrawal of consent: what they can teach us about patient management. *The Primary Care Companion for CNS Disorders*, *13*(1), 27143. doi: 10.4088/PCC.10f01047blu
- Eze, B., Agu, K., & Nwosu, J. (2010). Discharge against medical advice at a tertiary center in southeastern Nigeria: sociodemographic and clinical dimensions. *Patient Intelligence*, *2*(Default), 27-31.
- Cohen, I. G. (2013). The Globalization of Health Care: Legal and Ethical Issues. United States Oxford University Press.