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Discharge Against Medical Advice: A Qualitative Case Study

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Abstract

Background: The most important criterion for healthcare success is customers' satisfaction. The number of patients leaving the hospital on their own decision or Against Medical Advice (AMA) can be a sign of their discontent and a problem with considerable importance. In this regard, the present study was designed aiming at evaluating the causes of AMA discharges at a hospital affiliated with Shiraz University of Medical Sciences. **Materials and Methods:** This is a qualitative study on all patients who were discharged AMA from the studied hospital during 3 months in 2012 (March 21 – June 21). Data were collected through telephone interviews. All interviews were written by the researcher and analyzed using grounded theory with thematic method. **Results:** The most frequent reasons for discharge AMA were classified into 3 general themes: issues related to hospital status, the staff and the patients. Additionally, the most frequent reasons causing discharge AMA were as follows; 1. Sense of recovery; 2. Failure to register discharge order despite verbal order, 3. Physicians and nurses' inadequate care (technically); 4. Lack of informing the patients and their relatives as to the patient's condition properly; 5. Crowded wards; 6. Lack of attention to patients by the staff (emotionally). **Conclusion:** It seems that if hospital managers want to reduce discharge AMA, it is better to consider the causes. Based on such causes, effective intervention can be implemented which may differ in terms of resource-consuming. **[GMJ. 2016;5(1):31-41]**

Keywords: Discharge; Medical Services; Medical Advice; Hospitals

Introduction

Customer orientation and service applicants satisfying principle is considered as one of the main orientations of today's organizations in modern theories, and has proved its efficiency to improve performance, productivity and success of the organizations in various studies. Also, in administrative and operating systems, public satisfaction with the services of governmental organizations is one of the main indicators of its efficacy and development and factors such as proper encounter and correct information can lead to

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satisfaction of service recipients [1].

In the field of healthcare, the increasing social awareness of health issues and quality of care on the one hand, and increasing health care providers on the other hand have led applicants to have a broader area of choice. Therefore, attracting and satisfying the customers have become more difficult than before and in this field of competition, the organizations which attempt more for satisfying their customers will be more successful [2].

In health care system, the patients' judgment is positive, when healthcare is provided according to their expectations. Good performance leads to satisfaction, based on patient expectations; therefore, the most important criterion for the success of health system is customers' satisfaction. Hospitals should operate different strategies in order to attract and promote customer loyalty and identify customers who do not wish to stay more in the hospital. In this regard, investigating and determining the causes of discharge against medical advice (AMA) are one of the methods that have been emphasized by researchers. The number of patients who leave the hospital on personal desire, i.e. against medical advice, can be a sign of their discontent and a problem with considerable importance [3].

Discharge AMA, on one hand, has a negative effect on patients' treatment, and on the other hand, increases hospital costs and reduces hospital income. These patients often suffer from acute illnesses and severe signs at the time of discharge. Their prognosis is also worse compared to patients discharged with physician's orders [4]. Patients discharged AMA, taken as a whole, are an at-risk group for both morbidity and mortality [5, 6]. Discharge AMA is the strongest predictor of readmission within 15 days after leaving the hospital, 21% of which will be readmitted in the mentioned period.

Readmission rates within 7 days in patients who were discharged AMA is 14% versus 7% in other patients who were not self-discharged [7]. In Canada, 10% of self-discharged patients were readmitted. Self-discharges were reported as 1% of all discharges in Canada and between 2.2-8% in America [8].

Rate of discharge AMA in a teaching hospital in Saudi Arabia was 4% [9]. Rate of readmission in other studies was 21%, 29/7% and 71.3% [3, 6, 10].In studies conducted in Iran, the rate of discharge AMA was reported in a range between 3.3%-10% [4, 8]. This was between 0.73%-13% in studies abroad [11, 12]. Saitz *et al*. (1999) reported that lack of insurance and poor economic status is one of the main factors of discharge AMA in patients with pneumonia [13].

Results from St. Michael's hospital (in Toronto, Canada) showed that 28% of self-discharges were due to patient's dissatisfaction with medical team. Personal or family problems, feeling recovered enough to leave the hospital, treatment dissatisfaction, feelings of monotony, boredom and lack of interest in hospital's space were reported as other reasons [3]. In Iran, dissatisfaction with clinical diagnostic procedures was stated as the another main reason [14]. On the other hand, male gender, age, psychological and personality disorders as well as alcohol and drug abuse are other reasons for discharge AMA [5, 15].

Determinants of discharge AMA also varied in studies performed nationally and abroad. In a study by Kavosi *et al*., there was a relationship among insurance status, type of insurance, types of diseases and health sector and the rate of discharge AMA [16]; whereas, in Tulayi's study, there was no significant relationship between the mentioned factors and discharge AMA [4].

In other studies, overcrowding and insufficient care [17, 18], financial problems [17] and long waiting time were mentioned as the reasons for discharge AMA [19].Most studies have emphasized influential factors and determinants of discharge AMA by using quantitative or correlation methods. Also, the available form on discharge against medical advice does not determine the causes of such discharge [20].Providing strategies for decreasing the rate of discharge AMA by analyzing the current circumstances and developing effective interventions may benefit both patients (improving their health) and health care systems (decreasing unnecessary readmissions) [10]. Some studies have suggested that future prospective and qualitative studies (e.g. semi-structured interviews with patients) are probably beneficial and should be done to recognize reasons for discharge AMA. This may assist in reducing discharge AMA and

consequently improve patient outcomes and reduce waste of resources [9, 10].Therefore, considering high rates of discharge AMA (9%) in the studied hospital that had been identified in a previous study [16], we decided to review the causes of discharge AMA for identifying improvable points in the hospital and providing to hospital authorities with strategies to take measures for solving the problems and reducing the discharge rate.

Materials and Methods

This is a qualitative study using grounded theory method. The study was done at a teaching public hospital of Shiraz with 693 active beds. The study population included all patients who signed self-discharge form and discharged against medical advice from the studied hospital between March 21 and June 21, 2012.

After determining the number and list of the mentioned persons and extracting their information from their medical records, we classified the data depending on the items in their medical records and also variables probably preventing the patients from mentioning the reasons for discharge AMA, for example gender, place of residence, insurance status, marital status, etc. Therefore, we divided the individuals into different batches with different criteria such as; ACEG person means: a male (A), urban (C), with insurance (E) and single (G) person; or BDFH person: a female (B), rural (D), without insurance (F) and married (H)).

In each category, there were a number of people who were similar in terms of the mentioned variables. These batches were as follows: ACEG, ACEH, ACFG, BCEG, BCEH, BCFG, BCFH, ADEG, ADEH, ADFG, ADFH, BDEG, BDEH, BDFG, and BDFH.

As such, and considering all criteria that could influence patients responses to the question such as "their reasons for discharge AMA", a sample of 16 persons consisting of a minimum number of people who should be interviewed was formed, considering the fact that at least one person in each batch should be interviewed. Also, authors added a number of patients depending on their insurance type (medical service Insurance, Social Security, Armed Forces Insurance, Imam Khomeni Foundations Insurance), their age and the department they were discharged from (emergency, internal, pediatrics …) in order to ensure that the selected range of individuals has the most possible diversity and no responses (causes) are missed. Thus, first using electronic information of the patients, they were grouped based on batches and then 50 individuals were randomly selected from these groups. Then, in order to reach their contact numbers, we referred to their medical records and finally 47 contact numbers were obtained. In conjunction with 3 other contact numbers, one was not listed and the other two were flawed. Interviews were conducted by telephone calls and the interviewee person (patient or patient guardian or his relatives by the time of admission and discharge AMA) could express themselves freely. Indeed, open and unstructured questionnaire were used in this survey. If a person did not answer or was not willing to cooperate after 3 consecutive contacts, the next person in the list would be interviewed instead. It is worth mentioning that consistent with qualitative study routines, when data saturation was achieved (when all interviewed individuals' answers were the same and no new cases were mentioned), the interviews were stopped. Moreover, if data saturation was not achieved by interviewing one person of each batch, another person of the same batch was interviewed.

We continued our interviews till we were unable to add new data to our set of replies.

At the end, 30 successful interviews were performed and the remaining 17 contacts were unsuccessful (switched off, not available or not responding contacts) after 3 consecutive attempts. Of course, data saturation was achieved after these interviews. After completion of interviews and saturation of answers, data were analyzed thematically and arranged in different categories. It is worth noting that the study was approved by the research deputy and medical ethics committee of Shiraz University of Medical Sciences and an oral consent was a part of subject enrolment.

Results

Among those interviewed, 58.6% were women. Most subjects were adolescent and adult

(82%). Most of them (79.3%) were covered by at least one of the insurance types, discharged against medical advice from emergency department (60%) and were residents of the city Shiraz (80%).

The average length of hospital stay was 3.5 days; 31% of these individuals were readmitted to the same hospital within a few days of discharge and 41.4% to other hospitals.

Review of the discharge AMA causes by studying the interviews resulted in 44 causes in the form of 3 general themes and 7 subthemes. These themes included: 1. "Issus related to hospital status" (50%); 2. "Issues related to hospital medical staff" (45%); and 3. "Issues related to patient" (27%). (Themes and sub-themes are shown in Table 1)

As shown in Table 1, these causes are classified into forms of the subthemes of "Issues related to equipment, physical space and facilities", "Hospital process issues", "Teaching hospital issues", "Issues related physician", "Issues related to other medical staff", "Attitudinal and emotional issues" and "Economic and occupational issues". Also, among all causes of discharge AMA, "feeling of recovery", "failure to register physician's order of discharge despite verbal order", and "lack of adequate medical and nursing care (technically)" were the most frequent ones.

Issues related to Hospital Status

The most frequent cause of discharge AMA reported by patients was related to hospital status. These issues are summarized in three subthemes of "issues related to equipment, physical environment and facilities", "hospital processes issues" and "teaching hospital issues".Among them, causes related to "hospital processes" had the highest frequency. "Crowded wards" was one of these issues mentioned by the patients frequently.

Long waiting lists for patients requiring emergency surgery compared with private hospitals, was also mentioned by some. In this regard, statements of one of the patients' father are as follows: "My adolescent son had a motorcycle accident and was suffering from leg fracture and other injuries. The hospital booked for his surgery for the next week. We could not wait because my son's condition was deteriorating; on the other hand, he had to recover fast so he could start school as soon as possible. Therefore, we took him to a private hospital where we were treated with great respect and the surgery was performed on the same day."

About other causes related to the "hospital processes issues", another patient's relative stated: "I was sent repeatedly to different sectors in the hospital such as pharmacy or out of hospital to purchase a particular drug or instrument, and after I returned not being able to purchase them, I was told that the required items existed in the hospital and then they were used for the patient". Also, another patient's relative explained: "I was sent to purchase a particular drug from the pharmacy. After returning, I was not able to find my patient in the same ward. After much searching and asking a few nurses, I found out that my patient was transferred to another ward without informing me".

"Issues related to equipment, physical environment and facilities" were also mentioned by many patients. Issues such as unclean wards, poor facilities like hard seats, lack of proper facilities of the emergency ward to stay with the patient at night, improper physical environment such as damaged roof of a room, the sounds of cats at nights from the ceilings or out of order bathrooms are some of these issues.

"Teaching hospital issues" is another subtheme that leads to patient discharge AMA. A large number of students in medical wards, performance of surgeries by medical residents despite patients' will, performing unnecessary procedures for patients solely for student learning, and also lack of skill and responsibility of medical students in performing medical treatments are some reasons related to this subtheme. For example, with regard to lack of skills and responsibility of medical students, a patient's guardian explained: "I discharged my child from the hospital because they put too many needle holes in his body".

Issues related to Hospital Staff

These issues are summarized into two main subthemes of "factors related to physician" and "factors related to other medical staff". The subtheme "reasons related to other medical staff" had the most frequency in this theme

as well as among all other themes. Some of these issues are "lack of physicians and nurses' attention to the patient and his relatives (emotionally)", "lack of physicians and nurses' proper handling of patients technically and medically" and "lack of physicians and nurses' responsibility". In relation to "lack of physicians and nurses' responsibility", a patient stated: "almost none of the staff accepted patient's responsibility during the time of working shift change (13:30-15:30) and sometimes after that".

Another subtheme is "issues related to the physician". A patient's relative, for example, explained in this regard that due to worsening of the patient's condition or his poverty, the physician tried to convince him not to continue the treatment and hospital stay.

According to the patient's relative, the physicians said: "there is no point in continuing his treatment".

Issues related to the Patient

These are divided into 2 subthemes of "attitudinal and emotional issues" and "economic and occupational issues". "Attitudinal and emotional issues" were more frequent and from issues related to this subtheme, "sense of recovery" was the most common reason of discharge AMA. After that, it is "fatigue and irritability of the patient and his relatives of hospital stay".

In this regard, some respondents had the impression that home care is more effective or they had bad impression about the hospital. The other subtheme was "occupational and economic issues" which included items such as high hospital costs, poverty of the patients and lack of insurance which had led to discharge AMA.

Discussion

Based on our findings, the 3 main themes of discharge AMA in the studied hospital were "issues related to hospital status", "issues related to medical hospital staff" and "issues related to the patient". This is consistent with a previous study on AMA patients, and among the patient's factors, the choice of "feeling better" had the highest impact. It was also indicated that among medical staff factors, "physician and nurse's lack of medical service" had the highest impact [21].

In the study of Rangraz Jeddi *et al*. (2010), the reasons of discharge against medical advice were categorized into 3 groups: factors related to the disease of the patients, the hospital circumstances and the medical staff [8].

Moreover, in Roodpeyma *et al.*'s (2010) study, the reasons for discharge AMA were as follows: parent's assumption of improvement (32.9%), dissatisfactory treatment and care (29.9%), inconvenience for child hospitalization (18.5%) and financial constraints (15.5%) [22]. These problems can be solved by increasing the patient's awareness and strengthening the physician's relationship with patient and patient's family. Therefore, establishment of emergency department (ED) physicians in EDs and recruitment of sufficient staff may solve the problem [21]. In another study, lack of consent for surgery or other invasive procedures was the reason cited for discharge AMA in 31% of the patients, followed by personal or family issues (17%); the next three most commonly mentioned reasons for discharge AMA were feeling well (13%), financial problems (11%) and desire to be transferred to another hospital (10%) [10].Almost most of the problems mentioned in this study can be resolved through sufficient attention from the authorities, which can lead to not only reduction in discharge AMA rate, but also reduction in hospital costs and the costs imposed on the patients due to readmission, and reducing complications due to early discharge [9].

Patients who leave AMA are at risk of early readmission, which can result in higher, unnecessary health care costs [5, 12]; for example, in Hwang *et al*.' study, it has been shown that the risk rate of readmission of the patients who had been discharged against medical advice was 2.5 % [3].

In a study (2012), among 943 discharge AMA cases in the analysis, 19.4% were readmitted within the study period, 51.9% of them returned to the hospital within 15 days, 39.9% within 16-90 days and the remaining 8.2% were readmitted more than 90 days following discharge AMA [10].

In another study, patients who left AMA were more likely to have an asthma relapse within 30 days [23].

This findings suggests that many of the reasons resulting in discharge AMA can be easily considered by the managers and those in charge, for example providing some facilities for patients and their relatives, such as comfortable beds, lounge chairs, a quiet space away from environmental tensions or changing the design and space and building facades of the hospital so that it could remit the grief and distress of the patient and his relatives and would not impose heavy and unbearable costs. The majority of discharge AMA cases could have been prevented by more satisfactory facilities and effective communication among medical staff and the parents [22].

Most frequent causes of discharge AMA that could be intervened are those related to hospital status. Therefore, hospital management can resolve the dissatisfaction factors by reforming the hospital processes by small investments in facilities and hospital hoteling and thereby decreasing discharge AMA rates.

In Pourkarimi *et al*.'s (2014) study, the management factor ranked the second effective factor in discharge AMA, and lack of equipment was the most influencing factor [20].

According to the results of this study, it appears that the most frequent and important reasons causing discharge AMA were as follows: 1. Sense of recovery; 2. Failure to register discharge order despite verbal order; 3. Physicians and nurses' inadequate care (technically); 4. Failure to inform the patients and their relatives of their condition properly; 5. Crowded wards; 6. Lack of attention to patients by staff (emotionally). Other studies have found that patients report feeling better as their primary reason for leaving AMA and it's the most frequent cause of discharge AMA [5, 10, 17, 18, 21]. The result of a study (2014) showed that the highest (%49.7) discharge factor in men was relative improvement and the highest discharge in women was follow-up treatment at home [20].

Teaching hospital was mentioned as a factor of discontent by various individuals, although in Ibrahim *et al*.'s study (2007), teaching hospitals had a fewer rate of discharge AMA [15]. Holding briefing sessions for students before entering medical wards to acquaint them with hospital processes and patient rights, proper communication with patients and their relatives can reduce this discontent in future. In Onukwugha *et al*.'s (2012) study, patients identified an unmet expectation to be involved in setting the treatment plan as a reason to leave AMA. Participants identified improved communication as a solution for reducing discharges AMA. Patients emphasized that providers should be educated as to know cultural diversities, interpersonal skills and customer services. Moreover, patients indicated that there should be more truthful and accurate communication from providers regarding the waiting time [19]. To raise awareness of the patients regarding the dangers and consequences of leaving the hospital, effective communication should be established and strengthened between patients, physicians and medical staff [17].

A large number of issues are related to medical staff that might be solved with proper training and adequate supervision. A solution that can be offered is obliging physicians to complete and register patients' discharge forms when the patients have recovered and no additional treatment is needed or there is no point in their further hospital stay. Many interviewed persons noted that the physicians discharged them verbally, for example a patient's relative quoted from physician: "your patient has recovered, but you could keep him in the hospital only for extra insurance reimbursement" or the physician has dissuaded the patient from further treatment due to his poverty or seriousness of his condition or has stated: "further treatment would be of no use for him" or the desired surgery was not performable at that time (liver transplant, for example). Despite physician's verbal discharge order, the patient was required to fill the discharge AMA form since the order was not registered. This result was consistent with Kariman *et al*.'s (2013) study indicating that the "Oral statements of physicians regarding improved conditions" was 9.2% of discharges AMA [17].

These results in unrealistic increase in discharge AMA ratio on one hand, and not registering the patients' discharge responsibilities, on the other hand. It is noteworthy that these false statistics exist about the patients who change their wards and their hospitals, since some patients noted that they were required to fill discharge AMA forms in these

cases. This problem can be caused by a deficiency of informing patients of the hospital routine and procedures or the lack of staff's responsibility for patients' discharge AMA. Assuring the medical staffs' care (physicians and nurses), creating strategies for monitoring their technical performance and ensuring their attention and their timely and proper services to the patients seem to be effective strategies. Another consistency in the literature on AMA discharges is the recommendation for proactive physician patient communication [5]. In a study (2012), the interviewed physician recommended training programs that would educate providers on what it feels like to be 'on the patients' side'[19].

A couple of factors were related to patients which could not be intervened from the hospital except in cases such as tiredness of hospital stay or sense of recovery that could be reduced with the help of proper education of patients about their disease and treatment and diagnostic processes and dangers and consequences of leaving the hospital [17]. To eliminate the false or temporary "feeling better" of patients, we should inform the patient before he/she decides to leave the hospital AMA because most patients do not have necessary information about the side effects and outcomes of their decisions [21].

In addition to these, identifying patients without insurance or with economic issues and designing a program to cover and guide these patients could reduce their discharge AMA rate. Lower income, public health insurance and lack of health insurance were associated with significantly higher rates of discharge against advice [5, 10, 23-25]. Nearly all parents lacking health insurance coverage cited financial problems as a reason for DAMA [22].

Conclusion

Finally, providing clear instruction during an untimely discharge is of paramount importance. It is important that patients at risk for discharge AMA be identified early, so that planning for discharge begins soon after admission. Various intervention scenarios could be designed for use by treating physicians to either deter patients from leaving prematurely or improve their acceptance of outpatient follow-up. Practical solutions include communicating with the patient in an empathetic tone, nurses attending the patient-doctor consultation, educating physicians about the results of research on discharge AMA, providing physicians with education about strategies for communicating with patients likely to leave against medical advice, educating physicians about the consequences of leaving against medical advice and informing the patient about the patient advocate service.

Limitations of This Study

The present study faced some limitations. Since this is a qualitative study, causative factors leading to discharge AMA were extracted and viewed from patients' perspective as far as possible; therefore, the percentage of each of factors cannot be described based on this study, so there is a need to conduct a quantitative study with greater and more accurate sample size. Moreover, due to lack of face to face access to patients after their discharge, we were forced to interview by phone. Additionally, because of phone interview and the stop in the phone call, we were forced to call the person a couple of times. Finally, some interviews were unsuccessful (switched off, unavailable or not responding contacts) after 3 consecutive attempts.

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Conflict of Interest

The authors report that there is no conflict of interest concerning the materials or methods used in this study or the findings specified in this paper.

Table 1. Causes of Discharge Against Medical Advice Regarding Patients' Perception

Row	Themes	Subthemes	Issues	Frequency	Sum	
1	Issues related to hospital staff	Issues related to physician	Failure to register physician's order of discharge despite verbal order	9	15	45
2			Physician dissuaded the patient from further treatment due to his poverty or severity of his illness	3		
3			Absence of the primary physician responsible for the patient	3		
4		Issues related to other medical staff	Inappropriate behavior and disrespect of the physician or staff to the patient and his relatives	2	30	
5			additional items and unnecessary requests for patients from relatives by health personnel	1		
6			Lack of physicians and nurses' attention to the patient and his relatives (emotionally)	6		
7			Lack of physicians and nurses' attention to the patient (technically)	9		
8			Lack of personnel responsibility	3		
9			Failure to inform the patient or his relatives of his condition	8		
10			One of the personnel suggested to transfer the patient to a private hospital	1		
11	Issues related to patient	Attitudinal and emotional issues	Feeling recovered	11	21	27
12			Patients or their relatives tiredness of hospital stay	3		
13			Hospital food dislikes	1		
14			Having relatives in home for which patient is personally responsible	1		
15			Lack of believe in hospital stay	4		
16			Having familial issues	1		
17		Economic and occupational issues	Student or employed patients	1	6	
18			Lack of insurance	1		
19			High hospital costs or poverty of the patient	4		

Continus of **Table 1.** Causes of Discharge Against Medical Advice Regarding Patients' Perception

20	Issues related to hospital status	Issues related to equipments, physical space and facilities	Feeling lonely in the ward	2	20	50
21			Inappropriate location of the ward	1		
22			Inadequate air ventilation	2		
23			Unclean wards	3		
24			Inadequate facilities (tighten seats and...)	3		
25			Inadequate physical space of the wards or the hospital (damaged roofs, cat noises at night, broken toilets and …)	2		
26			Shortage or absence of certain amenities for patients or their relatives (sheets, blankets and …)	1		
27			Old or defective equipment and medical devices (radiation therapy devices, MRI and …)	2		
28			Relevant part or parts of the hospital was under repair	2		
29			Lack of beds in relevant ward	2		
30		Hospital process issues	Crowded wards (A large number of patients in the ward)	7	23	
31			Nursing shortage in the wards	1		
32			Irregularity of the wards	1		
33			Long waiting lists for patients requiring emergency surgery (compared to private hospitals)	4		
34			No permission to choose physicians	1		
35			Sending relatives to other hospitals or wards on numerous occasions despite the existence of the required instrument or drug	3		
36			Transferring the patient to another ward due to lack of empty beds without informing the relatives	1		
37			Delay in patients treatment and care	2		
38			Discharge to transfer to another ward (liver ward)	1		
39			Transferring the patient to another hospital	1		
40			The patient was referred to hospital on holidays	1		
41		Teaching hospital issues	A crowded ward of students	4	7	
42			Lack of responsibility and skills of medical students	1		
43			Unnecessary tests for patients solely for student learning	1		
44			Performance of surgery by residents rather than the primary physician despite the patients will	1		

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