

FACTORS ASSOCIATED WITH DISCHARGE AGAINST MEDICAL ADVICE AMONG PATIENTS IN UNIVERSITY OF CALABAR TEACHING HOSPITAL CALABAR (UCTH)

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ABSTRACT

OBJECTIVE: the main objective of this study was to investigate factors associated with discharge against medical advice among patients in UCTH. To achieve the aim of this study, the following hypotheses were formulated to direct the study. There is no significant relationship between patients' factors associated with discharge against medical advice in UCTH. There is no significant relationship between medical staff factors associated with discharge against medical advice in UCTH. There is no significant relationship between hospital environmental factors associated with discharge against medical advice in UCTH. Literature related to the variables under study were reviewed accordingly.

METHODS: Descriptive research design was adopted for the study. This research design was considered most appropriate because the researchers do not have direct control over the independent variables, they are inherently not manipulatable. A sample of one hundred and four respondents was randomly selected for the study. The selection was done through the simple random sampling technique. This was to give every member of the population area equal and independent opportunity to be selected for the study. The questionnaire was the main instrument used for data collection. The instrument was subjected to face and content validation by experts in measurement and evaluation. The reliability estimate of the instrument was established through the test re-test reliability method.

RESULT: To test the hypothesis Pearson product moment correlation analysis was adopted. This statistical analysis technique was used because of the nature of the variables involved in the hypothesis directing the study. The hypotheses were tested at .05 level of significance. The result of the analysis revealed that patients' factors, medical staff factors and hospital environmental factors were significantly related to discharge against medical advice.

CONCLUSION: Based on the findings of the study, it was concluded that; Patients' factors have a significant relationship with discharge against medical advice. Medical staff factors have a significant relationship with discharge against medical advice. Hospital environmental factors have a significant relationship with discharge against medical advice. A similar study could be carried out again using other statistical analysis techniques to ascertain the validity and reliability of the present findings.

KEYWORDS: Factors Discharge, against medical Advice, Patients.

INTRODUCTION

Background to the study

University of Calabar Teaching Hospital (UCTH) plays an important role in preserving people's life. Management and evaluation of UCTH performances can only be attained by having reliable information about the current situation compared to other hospitals, UCTH receives the most large number of patients as well as the most serious ones; hence, the quality of medical service in UCTH can represent the general quality of the medical services provided by a hospital (Malekmakan, Haghpanah, Moravej, & Sharifi 2010).

It is believed that patient's satisfaction of medical services is a proper indicator for quality of services provided by hospitals. In order to enhance the

quality of medical services in UCTH, there should be a proper understanding of the current situation of UCTH along with an appropriate analysis of the problems (Mackinley, & Roberts, 2001).

The process of discharge is a critical phase in hospital management, and correction of it is a major strategy around which all hospital functions are defined and implemented. Thus, Discharge Against Medical Advice (DAMA) is a critical problem in hospitalization of patient in which a patient despite medical advice leaves the hospital earlier than due time (Carrese, 2006)). The outcomes of DAMA for the patient can be deterioration of his/her situation, even up to the point of death or the entailing side effects which cannot be cured in long time and render the therapeutic result unsatisfactory (Rangraz, Rangraz Jeddi, Rezaeei & Monfared, 2010).

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Moreover, readmission of the patient because of his/her severe condition imposes extra costs on the health care system which is an issue worth observing and discussing. So failure to complete the hospitalization can lead to re-lapse of disease, re-admission, and increase in medical costs for the patient (Kabirzadeh, Rezazadeh, & Mohseni Saravi, 2011) and Hwang, Li, Gupta, Chien, & Martin, 2003).

DAMA or self-discharge has been reported in most of healthcare management documents (David, & Alfandre, 2009, Saitz, Ghali, & Moskowitz, 1999, Dalrymple, & Fata, 1993 and Vander Stoep, Bohn, & Melville, 1991). There are many reasons for DAMA, namely dissatisfaction with hospital services, patient's factors, environmental factors and medical staff factors. patient or his/her parent's addiction or misuse of medications, patient's unaffordability to pay hospital expenses, mental problems, family problems (e.g. having a child at 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) (Baptist, Warriar, Arora, Ager, & Massanari, 2007, Ibekwe, Muoneke, Nnebe-Agumadu, & Amadife, 2009, Ibrahim, Kwoh, & Krishnan, 2007 and Fiscella, Meldrum, & Barnett, 2007).

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 (Hwang et al, 2003). If medical staffs are able to early detect patients with high risk of DAMA, they will then provide necessary advices to continue treatment (Hwang et al, 2003).

The key point in a discharge plan is the exchange of information between patient and physician or the medical staff, (Taylor, Lillis, & Lemone, 2004) which can be attained through teaching. Providing necessary information about illness, (Ashghly, Farahani, Mohammadi, Ahmadi, Maleki, & Hajizadeh, 2009)) its side effects and treatment is the undeniable right of patients. As such, in many countries this fact has been turned into a law especially the developed countries (Skelton, 2001).

The main aim of education is to inform a patient of his/her illness conditions, medical interventions and the optional choices which he/she has in the course of treatment (Hekmatpou, Anoosseh, & Alhani, 2007).

Most managers denied the patients of their right especially in UCTH. Clinical governance is a key strategy followed by the UCTH management in Cross River State-Nigeria and Federal Ministry of Health (FMOH) and patients' education and assessment of the reasons for DAMA constitute the main components of the clinical governance system in a hospital. If the health care providers will see the need to come together as a team in the hospital environment creating interpersonal relationship with the patents and the health care providers the problem of DAMA will be dealt with. This is why the researchers decide to investigate on the factors associated with discharge against medical advice among patients' in UCTH.

Statement of problem

Universally, and in the contemporary health care setting hospital is a second home for the sick. Therefore, the environment should be stimulating and exciting such that, creating good interpersonal relationship with the patient will go a long way to give the patient a sense of belonging. But these days the reverse is the case such that the patients will complain of the following namely dissatisfaction with hospital services, patient's factors, environmental factors and medical factors, patient's addiction or misuse of medications, patient's unaffordability to pay hospital expenses, mental problems such as being depressed and frustrated, family problems (e.g. having a child at 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) pose a problem to the patients and sign against medical advice.

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. If medical staff are able to early detect patients with high risk of DAMA, they will then provide necessary advices to continue treatment. The key point in a discharge plan is the exchange of information between patient and physician or the medical staff, which can be attained through teaching and psychotherapy with the patients providing necessary information about illness, its side effects and treatment is the undeniable right of patients in UCTH. As such, in many countries this fact has been turned into a law. The main aim of education is to inform a patient of his/her illness conditions, medical interventions and the optional choices which he/she has in the course of treatment. Most managers denied the patients of their right especially in UCTH. This is why the researchers decides to investigate on the factors associated with discharge against medical advice among patients in UCTH.

Purpose of the study

The purpose of the study was to determine the factors associated with discharge against medical advice among patients in UCTH

Specific objectives

- To identify patient factors associated with discharge against medical advice among patients in UCTH.
- To identify medical staff factors associated with discharge against medical advice among patients in UCTH.
- To determine hospital environmental factors associated with discharge against medical advice among patients in UCTH.

Hypotheses

- 1) There is no significant relationship between patients' factors associated with discharge against medical advice in UCTH.
- 2) There is no significant relationship between medical staff factors associated with discharge against medical advice in UCTH.

- 3) There is no significant relationship between hospital environmental factors associated with discharge against medical advice in UCTH.

Scope of the study

The study was limited to UCTH Calabar and the researchers is also concerned with patients' factors, medical staff factors, and hospital environmental factor.

Delimitation

The researcher was faced with limited time in carrying out this research which required her visiting the research setting several time before obtaining her data. Also the researcher experience difficulties with the patients as some were not able to open up to the reason why the patients will want to sign against medical advice. However, inspite of all these, the study was successful.

Significance of the study

This study might be of a tremendous benefit to nurses, health personnel, patients, researchers and traditional birth attendants. The report of the findings will be disseminated through possible research publications to:

- The nurses, to intensify efforts in health education classes to patients to adopt safe practices especially in the hospitalization of patients.
- The health personnel, it may add to their body of knowledge and stand a better chance of advising where necessary.
- Patients, it may serve as a corrective measure and enable them adopt safe practice of using the hospital for treatment that will prevent infection, protect and preserve the lives of their babies and mothers.
- The researchers, it might give them a sense of direction and enable them explore more into other areas.

The traditional birth attendants, it will enable them to adopt safer practices and less chance from harmful traditional methods since most patients prefer them because their services are cheap.

LITERATURE REVIEW

The review of this literature is related to the topic under study. The materials used for the purpose of this literature include: Journals, textbooks, magazines, written publications of various kinds and authors.

Patient factors

With regard to socioeconomic factors, foreign studies showed that low socioeconomic condition in some cases and high socioeconomic condition in others is considered as an influencing factor for DAMA (Tavalaiee, Asarii, Habibi, Khodami, Vahabi, & Noohi, et al., 2006, Planansky, Johnston, 1976, and Greenberg, Otero, Villanueva, 1994) Also in Ikefuan's study it was demonstrated that financial problem and lack of financial support is the most prevalent reason for DAMA. (Ikefuna, & Emodi, 2002) In line with such studies, our

study showed that patient's economic status is considered as one of the patient factor related to DAMA. Conditions of patients' economic status and his/her tendency to be present at his work place can account for their decision.

In contrast to Weingart et al. study in which lack of insurance has been stated as the main reason for DAMA, our study did not report this issue (Weingart, Davis, & Phillips, 1998). The lowness of treatment costs in public sector as well as support mechanisms and institutions such as Relief Committee Fund, welfare organization can account for this inconsistency.

Findings also showed that among the patient's factors, the choice of "feeling better" had the highest impact which accords with the findings of Rangraz Jeddi (Rangraz Jeddi, Rangraz Jeddi, & Rezaeei Monfared, 2010) and Roodpeyma (Roodpeyma, & Eshagh Hoseyni, 2010) and the foreign study of Holden (Holden, Vogtsberger, & Moh 1989). Moreover, the frequency of "feeling better" is also similar to the frequency of this factor found in the study of Kabirzadeh (Kabirzadeh, Rezazadeh, Mohseni & Saravi, 2011) in Iran and the study of Hwang in Canada (Hwang, Li, Gupta, Chien, & Martin, 2003). To eliminate the false or temporary "feeling better" of patients, we should inform them before he/ she decides to leave the hospital against medical advice (AMA).

Medical staff factors

It was also indicated that among the medical staff factors, "physician and nurse's lack medical service" had highest impact, the matter which recorded with the studies of Rangraz Jeddi Rangraz Jeddi (Rangraz Jeddi, Rangraz Jeddi, & Rezaeei Monfared, 2010) and Hwang (Hwang, Li, Gupta, Chien, & Martin, 2003) and is similar to the study of Doescher (Doescher, Saver, Franks, & Fiscella, 2000). Roodpeyma's study found patient's dissatisfaction with medical care and treatment as the primary reason (Roodpeyma, & Eshagh Hoseyni, 2010). In contrast to our results, Haywood's study (Haywood C, Lanzkron, Ratanawongsa, Bediako, Nelson, & Beach, 2010) found two factors of patient's lack of trust to medical workers and having bad experience of hospitalization as reasons for leaving hospital AMA. In a study conducted by Shirani, patient's dissatisfaction with medical staff medical services and the diagnosis methods as the most prevalent reasons for DAMA (Shirani, Jalili, & Asl-E-Soleimani, 2010) One reason of dissatisfaction with hospitals may be due to the teaching nature of them, giving the patient the sense of not being adequately attended, owing to more focus of attending physician on medical students rather than patients. Such a reason has been stated by Onukwugha et al. In an US study (Onukwugha, Saunders, Mullins, Pradel, Zuckerman, & Weir, 2010). These problems can be solved by increasing patient's awareness and strengthening the physician's relation with patient and patient's family. Nevertheless, two issues escalate the DAMA problem including the inadequate medical workers in teaching hospitals, and non-resident physicians, in a geographical place where the hospital is located, who cannot work as a full time physician in the hospital. Therefore, establishment of emergency

medicine physicians in hospitals and recruitment of adequate workers may overcome the problem.

Hospital environmental factors

Moreover, our study showed that among the reasons related to hospital environmental factors, "cleanliness of hospital" had the highest impact which is similar to Roodpeyma's study (Roodpeyma, & Eshagh Hoseyni, 2010) with respect to patient's dissatisfaction for hospitalization. The high influence which cleanliness of hospital had in the eye of the patients discharged AMA can be due to the high emphasis which their culture place on cleanliness in hospitals and their awareness of the danger of infections. This problem can be control by the more effective supervision of hospital directors on cleanliness of hospital environment, proper disposing of hospital wastes, and the performance of contractors, and by reinforcing the infection control committee this will go a long way to attract more patients to the hospital and discharge against medical advice will no longer be there because patients are comfortable in terms of hospital environmental sanitation.

Although it is expected for the medical worker to provide patients with adequate information about their illness and its possible side effect, its treatment and health care (Greenberg, Otero, & Villanueva, 1994) this study showed that most patients do not have necessary information about the side effects and outcomes of their decision. In this regard, our finding is similar to Mohammad Pour's study (Mohammad, Pour, Dehgan Naieri, 2006) on the patients discharged with their physicians' order, and Onukwugha's study (Onukwugha, Saunders, Mullins, Pradel, Zuckerman, & Weir, 2010) in which the medical worker's relation with a patient is considered as the main factor to decrease patients discharged AMA. But our finding is inconsistent with the of Kalantari's study (Kalantari, Karegar Najafi, Abbaszadeh, Sanagoo, & Borhani, 2011). Patient's inadequate information about the side effects of their decision can be for the heavy workload of staffs, lack of medical worker attention to the problem, and inadequate manpower increase the chances for DAMA.

Conceptual/theoretical framework

The conceptual framework used is Imogene King's theory of goal attainment. King describes her model as a conceptual system and the goal of nursing as bringing a person closer to a healthy state (King, 1997, 2001).

The conceptual system has three interacting systems: the personal, the interpersonal and the social. The nurse and the person interact toward a goal. The end-point of this interaction which occurs over time is transaction at which the person's goal is met.

Application to the model

The nurses or midwives by virtue of their training and knowledge are in a better position to display the requisite competence through their interaction with the patients who is seriously sick and need attention or information concerning his/her ill health. The practice demand that the midwives/nurses should establish a good rapport, establish a good human relationship, prompt attention and provide social support and comfort to the patients who is in pains.

These will eventually lead to the attainment of the desired goal (successful discharge) and subsequent positive perception of hospitalization avoiding discharge against medical advice.

When the above are not utilized as expected of the midwives/nurse performs below the expectation of the patients in the ward, the patients will probably develop a negative perception of hospitalization and will always sign against medical advice when in the hospital.

RESEARCH METHODS

This section deals with the methodology adopted by the researcher in the study. This include the research design, research setting, research population, sample and sampling technique, instrument for data collection, method of data collection and procedure for data analysis collection.

Research design

This is a descriptive research design as the researcher's purpose is to observe, describe and document patients discharge against medical advice. The researchers' main concern is to describe patients' perceptions of nursing care during hospital stay in University of Calabar Teaching Hospital, Calabar, and Cross River State, Nigeria.

Research setting

The area of study was Calabar, Cross River State of Nigeria. Calabar is located at the end of Southern Senatorial District of the state. The geographical location of Calabar urban is latitude 4° 58 north and 8° 17 east. Calabar is situated typically within the equatorial rain forest belt at the southern shore washed by the waters of the Atlantic Ocean.

Calabar has a common boundary to the south with Republic of Equatorial Guinea, to the east - Oron Local Government Area of Akwa Ibom State, to the west - Akpabuyo Local Government Area and north - Odukpani Local Government Area. Calabar is made up of communities like the Efiks, Efut, Quas and others. The common languages are Efik, and Ejagham.

This study was carried out in University of Calabar Teaching Hospital, Calabar. University of Calabar Teaching Hospital is a Tertiary Health Institution, founded in 1879; and is located at the south-east of Calabar. The hospital is made of three (3) annexes; permanent site, maternity annex and comprehensive health care center Okoyong. The hospital renders the following services, clinical services, man power development, teaching, and research.

The permanent site being the main study area is the heart of the hospital and comprises of both the administrative offices and the clinical wards of the hospital the maternity wards like labour ward, antenatal, post-natal, special baby care unit and gynae ward are all located at the permanent site.

Permanent site is located along Eastern high way behind University of Calabar. The permanent site of the hospital is bounded on the east by Unical Hotel, on the west by Qua River (Esuk Atu) and on north by the Calabar International Airport.

The University of Calabar Teaching Hospital is currently made up of 600 beds which are distributed

among the three (3) annexes and has staff strength of 550 nurses and 250 doctors.

Research population

The research population for this study involves all the admitted patients who signed against medical advice in University of Calabar Teaching Hospital Calabar. They are about one thousand, three hundred and thirty-two (1,332) in number within the period of study.

Target population

This involves men and women who were duly admitted into various wards but signed against medical advice. In one year the population was six hundred and eighty (680).

Accessible population

This is made up of all the patients who are admitted in University of Calabar Teaching Hospital, Calabar between January 2013 and August 2014 they are numbering about three hundred and eighteen (318) of them.

Sample and sampling technique

Accidental sampling technique was adopted in sampling. One hundred and four (104) patients were selected for the study. The technique was adopted because all the women and men could not be met at the same time to enable the researchers adopt any other non- probability sampling technique, therefore the researchers just administered the questionnaire on the respondents. The total sample size for the study therefore was one hundred and four (104) subjects.

Reliability of instrument

To protect the instrument, the corrected questionnaire was administered to 10 discharge patients both men and women from University of Calabar Teaching Hospital, Calabar and one (1) week after, another questionnaire was given to the same group of patients so as to assess if there is any ambiguity of the questionnaire and also to ascertain that the questionnaire are appropriate for data analysis.

TABLE 1: Test-retest reliability Estimate of Factors Associated with Discharge Against Medical Advice (DAMA) (n=10)

Variables	No. of items	Testing	X	SD	r
Patient factors	5	1 st	19.82	2.88	0.72
		2 nd	19.72	1.98	
Medical staff factors	5	1 st	20.90	2.48	0.82
		2 nd	21.04	2.66	
Hospital environmental factors	5	1 st	20.42	3.10	0.85
		2 nd	22.81	3.78	

RESULTS

TABLE 2: Demographic indices of respondents

Variables	Frequency	Percentage
Age:		
Below 20	30	28.85
21-30	50	48.08
31 and above	24	23.07
Total	104	100
Sex:		
Male	70	67.31
Female	34	32.69
Total	104	100
Marital status:		
Single	20	19.23
Married	30	28.85
Divorced	40	38.46
Widowed	14	13.46
Total	104	100
Religion:		
Christian	80	76.92
Muslim	20	19.23
Others	4	3.85
Total	104	100
Occupation:		
Civil servant	22	21.15
Farmers	18	17.31
House Wife	4	3.85
Self employed	20	19.23
Trading	40	38.46
Total	104	100
Educational level		
No formal education	40	38.46
Primary	30	28.85
secondary education	20	19.23
Tertiary	14	13.46
Total	104	100

Sources: Field survey, 2015.

The results in Table 4.1 shows that 30 (28.85%) of the total respondents were between years 20 years, 50 (48.08%) were between 21-30 years, while 24 (23.07%) were 31 years and above. For sex, 70 (67.31%) of the total respondents were male, 34 (32.69%) were female. For marital status, 20(19.23%) of the total respondents were single, 30(28.85%) were married, 40(38.46) were divorced, while 41(13.46) were widow. For educational level, the result in shows that 40(38.46%)of the total respondents had no formal education, 30(28.85%) had their primary education, 20(19.23%) had their secondary education and 14(13.46%)had their tertiary education. For religion, the

result shows that 80(76.92%) of the total respondents were Christians, Muslims were 20(19.23%) while others were 4(3.85%). Similarly, for occupation, the results in shows that 22(21.15%) of the total respondents were civil servants, farmers were 18(17.31%),housewives were 4(19.33%), self employed were 20(38.46%)and 40(38.46%)were traders.

Hypothesis one

There is no significant relationship between patients' factors associated with discharge against medical advice in UCTH.

TABLE 3: Pearson product moment correlation analysis of the relationship between patients' factors and discharge against medical advice (N=104)

Variable	Σx	Σx^2	Σxy	R
Patients' factors	2341	6124		
Discharge against medical advice	3036	9156	67338	0.63

* significant at .05 level, critical $r = .159$, $df = 102$

The result of analysis on table 3 reveals that the calculated r-value of 0.63 is greater than the critical r-value of .159 at .05 level of significance with 102 degree of freedom. With this result the null hypotheses was rejected. This result therefore means that patients' factors has a significant relationship with discharge against medical advice.

Hypothesis two

There is no significant relationship between medical staff factors associated with discharge against medical advice in UCTH.

TABLE 4: Pearson product moment correlation analysis of the relationship between medical staff factors and discharge against medical advice (N=104)

Variable	$\sum x$	$\sum x^2$	$\sum xy$	r
	$\sum y$	$\sum y^2$		
Medical staff factors	1971	3743		
Discharge against medical advice	3036	9156	54186	0.53*

* significant at .05 level, critical r= .159, df = 102

The result in table 4 show that the calculated r-value of 0.53 is higher than the critical r-value of .159 at .05 level of significance with 102 degree of freedom. With the result of this analysis the null hypotheses was rejected. This result therefore means that medical staff factors has a significant relationship with discharge against medical advice.

Hypothesis three

There is no significant relationship between hospital environmental factors associated with discharge against medical advice in UCTH. The result of the analysis is presented in table 4.

TABLE 5: Pearson product moment correlation analysis of the relationship between hospital environmental factors and discharge against medical advice (N=104)

Variable	$\sum x$	$\sum x^2$	$\sum xy$	r
	$\sum y$	$\sum y^2$		
Hospital environmental factors	1806	3598		
Discharge against medical advice	3036	9156	44542	0.36*

* significant at .05 level, critical r= .159, df = 102

The result present in table 5 indicate that the calculated r-value of 0.36 is higher than the critical r-value of .159 at .05 level of significance with 102 degree of freedom. With the result of this analysis the null hypotheses was rejected. With this result therefore means that, hospital environmental factors have a significant relationship with discharge against medical advice.

Discussion of findings

The result of the first hypothesis revealed that patients' factors has a significant relationship with discharge against medical advice. The finding of this hypothesis is in agreement with Tavalaiiee, Asarii, Habibi, Khodami, Vahabi, & Noohi, et al., (2006) who observed that low socioeconomic condition in some cases and high socioeconomic condition in others is considered as an influencing factor for DAMA. Ikefuna, & Emodi, (2002) also demonstrated that financial problem and lack of financial support is the most prevalent reason for DAMA. He also showed that patient's economic status is considered as one of the patient factor related to DAMA. Conditions of patients' economic status and his/her tendency to be present at his work place can account for their decision.

Rangraz Jeddi, Rangraz Jeddi, & Rezaeei Monfared, (2010) also showed that among the patient's

factors, the choice of "feeling better" had the highest impact. To eliminate the false or temporary "feeling better" of patients, we should inform them before he/ she decides to leave the hospital against medical advice (AMA).

The result of the second hypothesis revealed that medical staff factors have a significant relationship with discharge against medical advice. To this finding is in line with that of Rangraz Jeddi Rangraz Jeddi Rangraz Jeddi, Rangraz Jeddi, & Rezaeei Monfared, (2010) who indicated that among the medical staff factors, "physician and nurse's lack of medical service" had highest impact, the matter which accorded with the studies of and Hwang (Hwang, Li, Gupta, Chien, & Martin, 2003) and is similar to the study of Doescher (Doescher, Saver, Franks, & Fiscella, 2000). Roodpeyma's study found patient's dissatisfaction with medical care and treatment as the primary reason. In contrast to our findings, Haywood's study (Haywood C, Lanzkron, Ratanawongsa, Bediako, Nelson, & Beach, 2010) found two factors of patient's lack of trust to medical staff and having bad experience of hospitalization as reasons for leaving hospita DAMA. In a study conducted by Shirani, patient's dissatisfaction with medical staff medical services and the diagnosis methods as the most prevalent reasons for DAMA. One

reason of dissatisfaction with hospitals may be due to the teaching nature of them, giving the patient the sense of not being adequately attended, owing to more focus of attending physician on medical students rather than patients. Onukwugha, Saunders, Mullins, Pradel, Zuckerman, & Weir, (2010) also note that these problems can be solved by increasing patient's awareness and strengthening the physician's relation with patient and patient's family. Nevertheless, two issues escalate the DAMA problem including the insufficient medical staff in teaching hospitals, and non-resident physicians, in a geographical place where the hospital is located, who cannot work as a full time physician in the hospital. Therefore, establishment of emergency medicine physicians in hospitals and recruitment of sufficient staff may overcome the problem.

The result of the last hypothesis showed that hospital environmental factors have a significant relationship with discharge against medical advice. The finding of this hypothesis is in line with Roodpeyma's study (Roodpeyma, & Eshagh Hoseyni, (2010) who noted that the high influence which cleanliness of hospital had in the eye of the patients discharged AMA can be due to the high emphasis which their culture place on cleanness in hospitals and their awareness of the danger of infections. This problem can be obviated by the more effective supervision of hospital directors on cleanliness of hospital environment, proper disposing of hospital wastes, and the performance of contractors, and by reinforcing the infection control committee.

Although it is expected for the medical staff to provide patients with adequate information about their illness and its possible side effects, its treatment and health care (Greenberg, Otero, & Villanueva, 1994) this study showed that most patients do not have necessary information about the side effects and outcomes of their decision. In this regard, our finding is similar to Mohammad Pour's study (Mohammad, Pour, Dehgan Naieri, 2006) on the patients discharged with their physicians order, and Onukwugha's study (Onukwugha, Saunders, Mullins, Pradel, Zuckerman, & Weir, 2010) in which the medical staff's relation with a patient is considered as the main factor to decrease patients discharged AMA. But our finding is inconsistent with the Kalantari's study (Kalantari, Karegar Najafi, Abbaszadeh, Sanagoo, & Borhani, 2011). Patient's inadequate information about the side effects of their decision can be for the heavy workload of staffs, lack of medical staff attention to the problem, and insufficient manpower.

Summary of the study

The main purpose of this study was to investigate factors associated with discharge against medical advice among patients in UCTH. To achieve the aim of this study, the following hypotheses were formulated to direct the study.

1. There is no significant relationship between patients' factors associated with discharge against medical advice in UCTH.
2. There is no significant relationship between medical staff factors associated with discharge against medical advice in UCTH.

3. There is no significant relationship between hospital environmental factors associated with discharge against medical advice in UCTH.

Literature related to the variables under study was reviewed accordingly. Descriptive research design was adopted for the study. This research design was considered most appropriate because the research does not have direct control over the independent variables, they are inherently not manipulatable. A sample of one hundred and four respondents was randomly selected for the study. The selection was done through the simple random sampling technique. This was to give every member of the population area equal and independent opportunity to be selected for the study. The questionnaire was the main instrument used for data collection. The instrument was subjected to face and content validation by the supervisor. The reliability estimate of the instrument was established through the test re-test reliability method.

To test the hypothesis to ascertain whether to reject or retain them, Pearson product moment correlation analysis was adopted. This statistical analysis technique was used because of the nature of the variables involved in the hypothesis directing the study. The hypotheses were tested at .05 level of significance. The result of the analysis revealed that patients' factors, medical staff factors and hospital environmental factors with significantly related to discharge against medical advice. Based on the findings of the study, conclusion was drawn recommendations and suggestions for further studies were made.

CONCLUSION

Based on results of the study, it was concluded that;

- 1) Patients' factors have a significant relationship with discharge against medical advice.
- 2) Medical staff factors have a significant relationship with discharge against medical advice.
- 3) Hospital environmental factors have a significant relationship with discharge against medical advice.

Recommendations

Based on the findings of the pupil the following recommendations were made.

- 1) Hospital environment should be kept clean to prevent infection and also to attract patients to the hospital environment.
- 2) Nurses should try as much as possible to create intra and interpersonal relationship with the patients this will go a long way to enhance quality nursing care among nurses preventing the patients to sign against medical advice.

Suggestion for further studies

Based on the limitations of the study, the following suggestions were made for further studies.

- 1) A replication of the study could be carried out again with either the serve or different population in the variables that were not previously investigated.

- 2) A similar study could be carried out again using other statistical analysis techniques to ascertain the validity and reliability of the present findings.

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