Dissertation at Fortis Hospital, Noida

By

Dr. Ridhima Joshi

PGDHM

2012-2014



International Institute of Health Management Research

Dissertation

At

Fortis Hospital, Noida

'Study on LAMA patients in Emergency Department'

By

Name Dr. Ridhima Joshi

Under the guidance of

Ms. Vanishree M R

Asst. Professor IIHMR, Delhi

Post Graduate Diploma in Hospital and Health Management

Year 2012-2014



International Institute of Health Management Research



Fortis Hospital
B-22, Sector-62, Noida 201 301, Uttar Pradesh (India)
Telephone : 0120 430 0222, 240 0222
Fax : 0120 240 3222

Emergency : 0120 240 0444, 105010

E-mail Website contactus.noida@fortishealthcare.com www.fortishealthcare.com

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This certificate is awarded to

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In recognition of having successfully completed her Internship in the department of

Medical Administration

From

March 12th, 2014 - May 12th, 2014

At Fortis Hospital, NOIDA

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning

We wish her all the best for future endeavors

Smita Angrish

Training & Development

Amit Toppo

Manager - Human Resources



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The following dissertation titled "STUDY ON LAMA PATIENTS IN EMERGENCY" at "FORTIS HOSPITAL, NOIDA" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of Post Graduate Diploma in Health and Hospital Management for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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Dr. B-5-Sign

Signature

Certificate from Dissertation Advisory Committee

This is to certify that Dr. Ridhima Joshi, a graduate student of the Post- Graduate Diploma in Health and Hospital Management has worked under our guidance and supervision. She is submitting this dissertation titled "STUDY ON LAMA PATIENTS IN EMERGENCY DEPARTMENT" at "FORTIS HOSPITAL, NOIDA" in partial fulfillment of the requirements for the award of the Post- Graduate Diploma in Health and Hospital Management.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

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Designation, Assistant, Rolesson
Organization 11 HMR, New Delh

Designation, MS

Organization Forts Mospital,

Noida

TO WHOMSOEVER MAY CONCERN

This is to certify that <u>Dr. Rid Lime</u> student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at Fortis Hospital Noida

From Mas 2014 to May 2214

The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements. I wish him all success in all his future endeavors.

Dr. A.K. Agarwal

Dean, Academics and Student Affairs

IIHMR, New Delhi

Name of mentor

IIHMR, New Delhi

NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled 'Study on LAMA patients. In Emergency Department' of Forris Hospital. No. I ala and submitted by (Name) Dr. Ridhima. Toshi Enrollment No. P.G. 12 [0.74] under the supervision of MS: Vanishyee MR
For award of Postgraduate Diploma in Hospital and Health Management of the
Institute carried out during the period from 2.0.1.2 To201.4
Embodies my original work and has not formed the basis for the award of any
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Name of the Student: Dr. Ridhima Joshi

Dissertation Organisation: FORTIS HOSPITAL, NOIDA

Area of Dissertation: EMERGENCY DEPARTMENT

Attendance: OK

Objectives achieved: Ves

Deliverables: OK

Strengths: Desire to Learn

Suggestions for Improvement: Locus on Tretatives

Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Date: 14/5/14 Place: Noida

ACKNOWLEDGEMENT

The most awaited moment of successful completion of an endeavour is always a result of persons involved explicitly or implicitly therein and it is impossible without the help gratitude and guidance of people around. My heartfelt gratitude to Mr. Sukhmeet Sandhu (Zonal director,) and Dr. Pankaj Dhamija (Medical Superintendent) at Fortis Hospital, Noida for giving me the golden opportunity to work with the India's leading health care provider. I would like to thank Ms. Alfons Madoc (Zonal Head HR) and Ms. Smita Roy Angrish (HR Manager) for showing keen interest in our training, and guide us despite their busy schedule.

I would like to express my immense gratitude to Dr. Pankaj Dhamija(Medical Superintendent) for providing me support and guidance not only for the project in the hospital, but for broadening my horizon and making me learn various other aspects of hospital functioning, which will definitely help me a lot in my career.

I am highly fortunate to express my deep sense of gratitude and indebtedness to Dr. L.P Singh, Director & Dr. A.K Agarwal, Dean IHMR NEW DELHI for their invaluable inspiration.

I would also like to thank my guide and mentor

Mrs. Vanishsree M R, for her valuable inputs and guidance for compiling this report.

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ABBREVIATIONS:

- ❖ FOS- Fortis Operating System
- ❖ TPA- Third Party Administrator
- ❖ LAMA- Leave Against Medical Advice
- ❖ DOR- Discharge On Request
- ❖ PWO- Patient welfare Officer
- ❖ IPD- Inpatient Department
- ❖ ICU- Intensive Care unit
- CCU-Critical Care Unit
- HDU-High Dependency Unit
- CSSD- Central Sterile Services Department
- * NABH- National Accreditation Board for Hospitals and Healthcare
- ❖ NABL- National Accreditation Board of Laboratory
- CSSD- Central Sterile Services Department
- **&** ER- Emergency Room
- ❖ F&B- Food & Beverages
- ❖ PPE- Personal Protective Equipments
- ❖ ECHS-Ex-Servicemen Contributory Health Scheme
- HIS- Hospital Information System
- * HAI-Hospital Acquired Infection

EXECUTIVE SUMMARY

INTRODUCTION:

- Emergency is the gateway to the hospital. Patient with pain and agony, enter the emergency department at any hour of day or night, expecting immediate treatment & solace.
- Efficient patient management, proper care and immediate treatment need to be done as it is the major feeder of patients to the hospital.
- 40-60% of inpatient & observation patients come from emergency department.

OBJECTIVE

The observational study was conducted from 21st April to 5th May in emergency department at Fortis Hospital Noida.

GENERAL OBJECTIVE: To study LAMA patients in emergency department

SPECIFIC OBJECTIVES:

- To study and understand the role of various stakeholders involved in emergency department the doctors, nurses, data entry operators etc.
- To identify the reasons for LAMA discharges.
- To further recommend solutions to tackle LAMA patients.

RESEARCH METHODOLOGY

- **RESEARCH DESIGN** Observational study was conducted. A group of patients observed over time, prospectively. By observing & tracking outcomes, cause and effect of LAMA can be better isolated.
- SAMPLING UNIT- Emergency department is the major feeder of patients to the hospital. So research was conducted in this department to track LAMA and find out the root causes.
- **SAMPLING METHOD-**Convenience random sampling method was used.
- DURATION OF STUDY- Total admissions (779) in emergency in 45 days were observed and a checklist was made on Microsoft excel.
- SAMPLE SIZE- 55 LAMA patients

• DATA COLLECTION

- ✓ Primary data- Checklist on Microsoft excel & semi structured questions from doctors, nurses etc
- ✓ Secondary data- Emergency registers, data entry operators
- TOOLS- Checklist was prepared on Microsoft excel with columns illustrating patient's name, age, sex, complain, department & reasons for LAMA.
- DATA ANALYSIS- In form of percentage & graphs

FINDINGS

- Revenue loss as emergency is the greatest feeder of patients to the hospital.
- **4** "Word of Mouth" marketing is reduced if the patient goes unsatisfied, because one satisfied patient further recommends it to others.
- ♣ Market shares are affected as emergency generates revenue & helps in increasing market share by providing maximum admissions to hospital.
- ♣ Efficiency of the hospital is questioned if the patient does not want to seek any treatment or admission in the hospital.

RECOMMENDATIONS

- Patient management should be done efficiently keeping in mind the LOS (<4hrs) so that the patient doesn't found the procedure lengthy & doesn't go unsatisfied
- Consultants should be asked to attend the patients in emergency along with the residents.
- Counselling of LAMA patients should be done effectively so that they understand the seriousness of illness & the treatment they require.

INTRODUCTION

Discharge from the hospital is an integrated process & not an isolated event. It should involve the development & implementation of a plan to facilitate the transfer of an individual from a hospital to an appropriate setting. As with admissions, the standard of discharge management impacts on both hospital efficiency & the quality of patient care .If discharges are delayed or mismanaged, this can reduce the quality of care of patients awaiting discharges & prevents the admissions of other patient.

Discharges are subdivided into 4 types that are as follows:-

- ✓ Planned discharges
- ✓ Unplanned discharges
- ✓ DOR
- ✓ LAMA

PLANNED DISCHARGES

A discharge which is planned one night prior to the day of discharge, when the doctor feels that patient's condition has improved & hence doctor informs the nurse regarding the same.

UNPLANNED DISCHARGES

These are not planned before hands. When the doctors are on rounds they see their patients and if that time they find the patient condition is good enough to discharge, then at that particular time they give the intimation to the nurse to discharge the patient.

DISCHARGE ON REQUEST (DOR)

A discharge on request by the patient by taking medical advice.

LEAVE AGAINST MEDICAL ADVICE (LAMA)

A discharge which is done against medical advice on the request of patient. Inspite of knowing that the patient is serious & needs immediate treatment the attendant or the patient himself asks for discharge. They agree to take the responsibility of whatsoever happens to the patient thereafter & sign the LAMA form.

Patient going LAMA are the ones who often seek readmission or further die within a few days.

SECTION A

Hospital Orientation

1.0 Overview:

Fortis Healthcare Limited was established in 1996 by its founder, Late Dr. Parvinder Singh. His vision of medical care was.

"To create a world class integrated Health Care delivery system in India, entailing the finest medical skills combined with compassionate patient care."

Fortis took its first step towards becoming a world-class provider of integrated healthcare delivery in India by setting up its first hospital at Mohali, Punjab.

Fortis Hospital, Noida was inaugurated on 7th November 2004, which is a centre of excellence in Orthopaedics and Neuroscience with additional focus on Cardiac Sciences, Minimally Access Surgery and Oncology. The hospital has a built over area of 5.53 acres and the allocation of space far above the current Indian norm of 800-900 sq.ft/bed. The total build up areas is 2.20,000 sq. ft with patient centric design by Kaplan Mc Laughlin Diaz (KMD) USA (award winning designers for FHI & MSH). This allows for flexibility to adapt and accommodate future trends of patient care.

It is a hub where some of the best medical professionals provide quality medical treatment catering to the special needs of patients and their families. The hospital has been designed and developed to deliver patient care with maximum ease warmth and effectiveness.

Fortis Hospital Noida has also achieved many first to its name:

- 1st NABH Accredited Hospital in U.P.
- 1st NABH Accredited Blood Bank in U.P.
- 1st NABL Accredited Lab services in U.P.



1.1 The Fortis Logo:

"A HEALING PASSION"

The Fortis Healthcare Limited Logo defines the commitment to patient care. The logo reflects their endeavour to achieve excellence in healthcare delivery system by bringing together the best of technology, medical expertise, and patient care. The logo also implies the human values that govern every facet of our organization.

The 2 nurturing hands along with a red dot on the top depicts- "nurturing hands caring for human life"

GREEN is the color of healing and is symbolic of the steadfast focus: to ensure the health and well being of those it ministers to. RED is an expressive of dynamic zeal with which it strives to make it a reality.

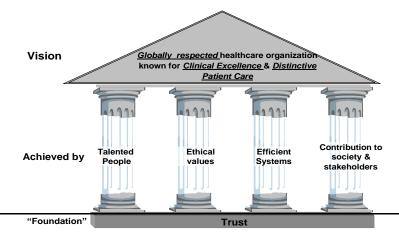
1.2 Mission:

- To become an Integrated Healthcare delivering organization guided by quality, excellence, technology and compassionate patient care.
- To establish Fortis Hospital Noida as a major corporate hospital in healthcare delivery system in the region.

1.3 Vision: Globally Respected Health care organization recognized for Clinical Excellence and Distinctive Patient Care.

1.4 Values:

They serve as a guideline for the routine conduct of each Fortisian. The core



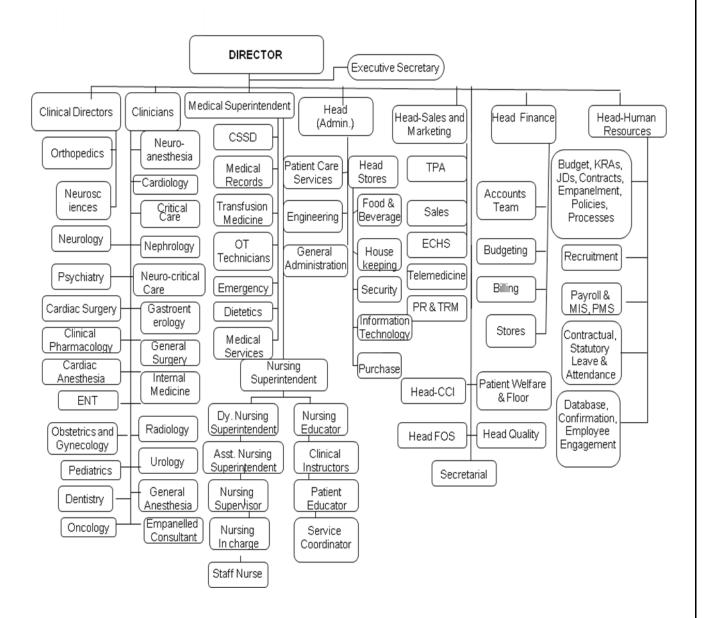
values of Fortis Healthcare are:

<u> </u>			
Patient	• Commit to 'best outcomes and experience' for our patients.		
Centricity	• Treat patients and their caregivers with compassion, care and understanding.		
	Our patients' needs will come first		
Integrity	•Be principled, open and honest.		
	•Model and live our 'Values'.		
	• Demonstrate moral courage to speak up and do the right things.		
Teamwork	 Proactively support each other and operate as one team. 		
	• Respect and value people at all levels with different opinions, experience		
	and backgrounds.		
	• Put organization needs' before department / self-interest.		
Ownership	• Be responsible and take pride in our actions.		
	• Take initiative and go beyond the call of duty.		
	Deliver commitment and agreement made.		
Innovation	 Continuously improve and innovate to exceed expectations. 		
	•Adopt a 'can-do' attitude.		
	Challenge ourselves to do things differently.		

1.5 Committees in the Hospital:

- 1. Quality Steering Committee
- 2. Hospital Infection Control Committee
- 3. Safety Committee
- 4. Sentinel Events Committee
- 5. Blood Transfusion Committee
- 6. Code Blue Committee
- 7. Pharmacy and Therapeutic Committee
- 8. Medical Audit Committee
- 9. Research and Ethics Committee
- 10. OT Committee
- 11. MRD Committee
- 12. Morbidity and Mortality Committee
- 13. CME Committee
- 14. Purchase Committee
- 15. Condemnation Committee
- 16. Credentialing and Privileging Committee
- 17. Sexual Harassment Committee

1.6 Organogram



1.7 Infrastructure:

The hospital offers world class infrastructure. It is designed as a green building to allow natural light into almost all parts of the building especially patient care areas. The architecture allows conservation of energy. The building is earthquake resistant. CFL lights have been used, thereby reducing power consumption. The space provided in the various departments is sufficient to move freely. CCTVs installed all over the building act as digital watchmen and help in security services. An efficient Hospital Information System is used to store all medical records.

The Hospital is equipped with:

- 250 bedded hospital with 191 beds currently in use.
- 8 ICUs with 63 beds: Medical, Surgical, Liver Transplant, Kidney Transplant, Cardiac, Neuroscience, CTVS and Neonatal ICU.
- 7 OTs
- 2 Cath Labs (Neuro Cath Lab and Cardiac Cath Lab)
- 4 bed -Triage & 6 observation beds -ER
- 11 bedded Dialysis centre equipped with modern dialysis machines like SLED (sustained low efficiency dialysis machine) and providing 24 hrs. Coverage.
- Diagnostic facility comprising of 1.5 Tesla MRI scanner, 64 slice CT scan, 4 X-Ray units, 3 Ultrasound units, 1 Mammography machine and 1 Bone dexa scan machine.
- All laboratory services of world class standard like histopathology, microbiology, biochemistry and hematology are present.
- Ambulances which transport patients to the hospital emergency.

SECTION B
EMERGENCY DEPARTMENT
- 22 -

REVIEW OF LITERATURE

1. Time & motion study in emergency department

Brain Rowe 2011

Introduction:

Delays in registration, triage, and access to support staff have the potential to add considerable time to Emergency Department length of stay (LOS).

Methods:

Prospective observational study on randomized dates/times between June 21 and July 8, 2011, at the University of Alberta Hospital ED. Up to five trained observers per 4-hour observation period collected patients' ED times using standardized forms and synchronized digital watches. Information on sociodemographics, presentation, consultations, and disposition was collected from the electronic ED information system.

Results:

From a total of 409 patients observed during the study period, 51% were male and the median age was 32 years (IQR 9, 56). Pediatric patients represented 33% of the sample. The most common ED complaint was unspecific symptoms/signs (48%), and 77% scored 3 in the Canadian Triage Acuity Scale. The time between when the patient's chart was received at the triage desk and bed placement was the longest step within the waiting room time (median 36 minutes; IQR 11, 60). The median time from triage to bedside ED nurse assessment was 63 minutes (IQR 28, 113) and from triage to first consultation request 2.2 hours (IQR 1. 1, 4. 4). Most patients were discharged (77%); the median ED LOS for admitted and discharged patients was 8. 0 (IQR 4. 8, 12. 5) and 3. 7 (IQR 2. 0, 5. 8) hours (p< 0. 0001), respectively.

Key recommendation:

These results support the role of promising interventions designed to expedite the care of less urgent patients and confirm the need to address the considerable delays at the back end of ED operations.

2. Predictors of patient length of stay in 9 emergency departments 2012

- 1. Jennifer.L.Wiler
- 2. Daniel A.Handel
- 3. Aditi A.Ginde
- 4. Dominik Aronsky
- 5. Nicholoas G.Genes

Objectives

Prolonged emergency department (ED) length of stay (LOS) is linked to adverse outcomes, decreased patient satisfaction, and ED crowding. This multicenter study identified factors associated with increased LOS.

Methods

This retrospective study included 9 EDs from across the United States. Emergency department daily operational metrics were collected from calendar year 2009. A multivariable linear population average model was used with log-transformed LOS as the dependent variable to identify which ED operational variables are predictors of LOS for ED discharged, admitted, and overall ED patient categories.

Results

Annual ED census ranged from 43 000 to 101 000 patients. The number of ED treatment beds ranged from 27 to 95. Median overall LOS for all sites was 5.4 hours. Daily percentage of admitted patients was found to be a significant predictor of discharged and admitted patient LOS. Higher daily percentage of discharged and eloped patients, more hours on ambulance diversion, and weekday (vs. weekend) of patient presentation were significantly associated with prolonged LOS for discharged and admitted patients (P < .05). For each percentage of increase in discharged patients, there was a 1% associated decrease in overall LOS, whereas each percentage of increase in eloped patients was associated with a 1.2% increase in LOS.

Conclusions

Length of stay was increased on days with higher percentage daily admissions, higher elopements, higher periods of ambulance diversion, and during weekdays, whereas LOS was decreased on days with higher numbers of discharges and weekends. This is the first study to demonstrate this association across a broad group of hospitals.

3. Syncope Evaluation in the Emergency Department Study (SEEDS)

2004

- 1. Win K. Shen, MD;
- 2. Wyatt W. Decker, MD;
- 3. Peter A. Smars, MD;
- 4. Deepi G. Goyal, MD;
- 5. Ann E. Walker, MS;
- 6. David O. Hodge, MS;
- 7. Jane M. Trusty, RN;
- 8. Karen M. Brekke, SC;
- 9. Arshad Jahangir, MD;
- 10. Peter A. Brady, MD;
- 11. Thomas M. Munger, MD;
- 12. Bernard J. Gersh, MB, ChB, DPhil;
- 13. Stephen C. Hammill, MD;
- 14. Robert L. Frye, MD

Background— The primary aim and central hypothesis of the study are that a designated syncope unit in the emergency department improves diagnostic yield and reduces hospital admission for patients with syncope who are at intermediate risk for an adverse cardiovascular outcome.

Methods and Results— In this prospective, randomized, single-centre study, patients were randomly allocated to 2 treatment arms: syncope unit evaluation and standard care. The 2 groups were compared with χ^2 test for independence of categorical variables. Wilcox on rank sum test was used for continuous variables. Survival was estimated with the Kaplan-Meier method. One hundred three consecutive patients (53 women; mean age 64 ± 17 years) entered the study. Fifty-one patients were randomized to the syncope unit. For the syncope unit and standard care patients, the presumptive diagnosis was established in 34 (67%) and 5 (10%) patients (P<0.001), respectively, hospital admission was required for 22 (43%) and 51 (98%) patients (P<0.001), and total patient-hospital days were reduced from 140 to 64. Actuarial survival was 97% and 90% (P=0.30), and survival free from recurrent syncope was 88% and 89% (P=0.72) at 2 years for the syncope unit and standard care groups, respectively.

Conclusions— The novel syncope unit designed for this study significantly improved diagnostic yield in the emergency department and reduced hospital admission and total length of hospital stay without affecting recurrent syncope and all-cause mortality among intermediate-risk patients. Observations from the present study provide benchmark data for improving patient care and effectively utilizing healthcare resources.

4. Why do patients with minor or moderate conditions that could be managed in other settings attend the emergency department?

11 May 2011

- 1. Robert Penson,
- 2. Patricia Coleman,
- 3. Suzanne Mason,
- 4. Jon Nicholl

Objectives: To estimate the potential of alternative providers of care for minor health problems to reduce demands on emergency departments (EDs).

Methods: Data were collected in a type 1 urban ED over a 2-month period in two stages: questionnaire to adult attendees presenting to the ED; and a notes review.

Results: The usable response rate was 68% (n=261/384). The notes review confirmed that more than two-thirds of the presenting conditions could have been managed in settings other than the ED. The attendees' reasons on the questionnaire indicated a strong belief that the only provider able to deal with their concerns at that time was the ED. For some users, the ED was not the first contact with a healthcare provider for the same health problem. Few believed that they would be seen quicker in the ED or that the ED was more convenient. The most frequent reason for presenting to the ED was 'being advised to attend by someone else'. The 'adviser' was more likely to be a health professional (doctor or nurse or NHS Direct) than to be 'friends or family'.

Conclusions: Although there appears to be considerable potential for minor conditions to be managed in settings other than the ED, our findings indicate that patients will continue to present these conditions to the ED. Patient perceptions of the urgency of their treatment need, and also the availability and capacity of alternative services may be offsetting their potential to substitute for the ED. Advice from other services may be contributing to demands on the ED.

5. <u>Frequent users of emergency departments: developing standard</u> definitions and defining prominent risk factors

2012 Feb 2.

Doupe MB¹, Palatnick W, Day S, Chateau D, Soodeen RA, Burchill C, Derksen S

Objective: Researchers identify factors that define frequent and highly frequent emergency department (ED) users.

Methods: Administrative health care records were used to define less frequent (1 to 6 visits), frequent (7 to 17 visits), and highly frequent (≥18 visits) ED users. Analyses were conducted to determine the most unique demographic, disease, and health care use features of these groups.

Results: Frequent users composed 9.9% of all ED visits, whereas highly frequent users composed 3.6% of visits. Compared with less frequent users, frequent users were defined most strongly by their substance abuse challenges and by their many visits to primary care and specialist physicians. Substance abuse also distinguished highly frequent from frequent ED users strongly; 67.3% versus 35.9% of these patient groups were substance abusers, respectively. Also, 70% of highly frequent versus only 17.8% of frequent users had a long

history of frequent ED use. Last, highly frequent users did not use other health care services proportionally more than their frequent user counterparts, suggesting that these former patients use EDs as a main source of care.

Conclusion: This research develops objective thresholds of frequent and highly frequent ED use. Although substance abuse is prominent in both groups, only highly frequent users seem to visit EDs in place of other health care services. Future analyses can investigate these patterns of health care use more closely, including how timely access to primary care affects ED use. Cluster analysis also has value for defining frequent user subgroups who may benefit from different yet equally effective treatment

OBJECTIVE

The observational study was conducted from 21st April to 5th May in emergency department at Fortis Hospital Noida.

GENERAL OBJECTIVE: To study LAMA patients in emergency department at Fortis Hospital Noida.

SPECIFIC OBJECTIVES:

- To study and understand the role of various stakeholders involved in emergency department such as doctors, nurses & data entry operators.
- To identify the reasons for LAMA discharges.
- To further recommend solutions to tackle LAMA patients.

RESEARCH METHODOLOGY

- **RESEARCH DESIGN** Observational study was conducted. As Emergency Medicine is an intensively studied discipline, and not all phenomenon can be studied by experimentation due to obvious ethical or logistical restrictions. A group of patients observed over time, prospectively. By observing & tracking outcomes, cause and effect of LAMA can be better isolated.
- SAMPLING UNIT- Emergency department is the major feeder of patients to the hospital. LAMA from emergency is adding to revenue loss & thus decreases in market shares. So research was conducted in this department to track LAMA and find out the root causes.
- SAMPLING METHOD-Convenience random sampling method was used. As it is useful in time sensitive research. This type of sampling can be done by simply creating a questionnaire or checklist and distributing it to the targeted group of patients which includes the total admissions in emergency.
- DURATION OF STUDY- Total admissions in emergency in 45 days were observed and a checklist was made on Microsoft excel.
- SAMPLE SIZE- 55 LAMA patients
- DATA COLLECTION
 - ✓ Primary data- Checklist on Microsoft excel & semi structured questions from doctors, nurses etc
 - ✓ Secondary data- Emergency registers, data entry operators
- TOOLS- Checklist was prepared on Microsoft excel with columns illustrating patient's name, age, sex, complain, department & reasons for LAMA.
- DATA ANALYSIS- In form of percentage & graphs

DATA ANALYSIS

A formal research was done to identify the reasons for LAMA discharge in emergency department. Primary data was collected with the help of "Emergency Register" The data was collected from the doctors, nurses as well, with the help of which reasons were analysed.

After analysis following findings were revealed:

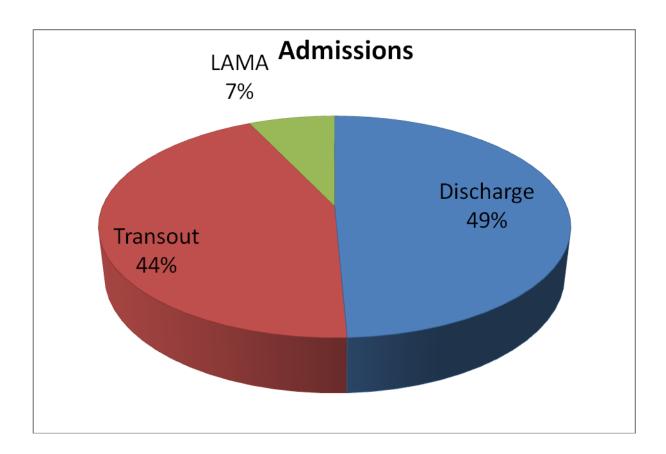


Fig 1: Shows the patient flow in emergency department:

• Total Admissions: 779

O Discharge: 384

Trans-out: 340

LAMA: 55

Out of 779 admissions in emergency department from 21st march to 5th may in between 9am-5pm, 384 were discharged as the necessary treatment was done & the patient didn't need admission.340 were transferred out to HDU'S/ICU'S/CCU'S. The rest on which our study is focused i.e. 55 went LAMA.

Dept wise analysis of LAMA:

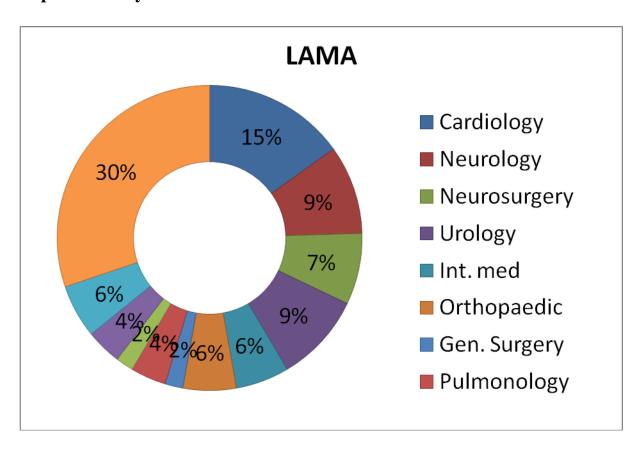


Fig. 2 shows the total percentage of LAMA from each department

- Maximum patient are under others category, these are the ones who asked for pain management only & refused for any kind of investigations.
- Cardiology stands second with the maximum patients who go LAMA.
- Followed by urology & neurology.

Contributing factors:

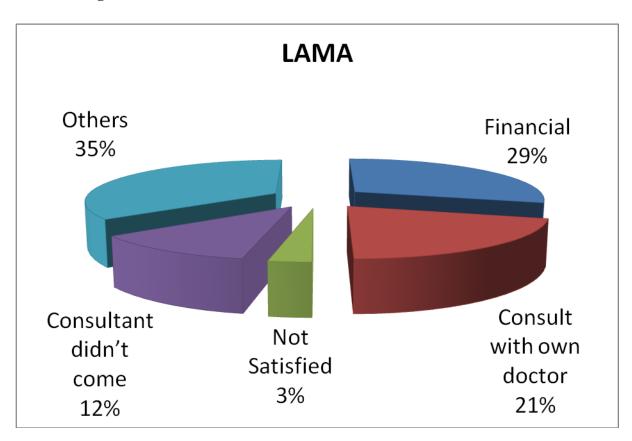


Fig 3: Shows the different reasons behind LAMA

- ✓ In 12% of the cases consultants didn't came & the patient was attended by the resident himself.
- ✓ 3% of the patient complained that the procedure was too lengthy & left unsatisfied.

- ✓ 21% preferred to take a second opinion or get the treatment done with their own doctor.
- ✓ 35% were the patients who belong to ER, who just came for pain management.
- ✓ 29% found the hospital too expensive & thus refused admission.

FINDINGS

- Revenue loss as emergency is the greatest feeder of patients to the hospital.
- "Word of Mouth" marketing is reduced if the patient goes unsatisfied, because one satisfied patient further recommends it to others.
- Market shares are affected as emergency generates revenue & helps in increasing market share by providing maximum admissions to hospital.
- Efficiency of the hospital is questioned if the patient does not want to seek any treatment or admission in the hospital.

RECOMMENDATIONS

- Patient management should be done efficiently keeping in mind the LOS (<4hrs) so that the patient doesn't found the procedure lengthy & doesn't go unsatisfied
- Consultants should be asked to attend the patients in emergency along with the residents.
- Counselling of LAMA patients should be done effectively so that they understand the seriousness of illness & the treatment they require.
- Feed forward mechanism should be done for LAMA patients.

CONCLUSION

As emergency is the front door of the hospital so efficient & effective measures should be taken for its smooth functioning. LAMA discharge from emergency department is wrong for the goodwill of hospital as well as its market shares. Proper measures should be implemented to handle the issue like separate counseling of LAMA patients, quick diagnosis & treatment etc. Even on patient's part, going LAMA is a wrong step leading to ill health. Patient should be educated regarding his health conditions & made aware about the treatment he requires for a healthy & normal life.

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