

A Systematic Research On Patients Impression About Causes For Hospital Delays

AUTHORS: Ms. K. C. RAJA SHREE, Asst. Professor, Saveetha School of Management, Saveetha Institute of medical and technical sciences, Chennai

kcrajashree7@gmail.com

RADHIKA. K, II Year, MBA Student, Saveetha School of Management, Saveetha Institute of medical and technical sciences, Chennai

ABSTRACT

Assuring emergency access towards acute medical services remains to be a challenge in most of the countries. In case this access is delayed, this may lead to loss of lives. This not only affects the hospital reputation it also costs lives. At international levels, evidences show that delayed medical services causes medical emergencies to patients. A timely medical service provided will make the patients satisfied and improve hospital's image. Subsequently, this will boost the loyalty of patients towards that hospital and bring in referrals. The delays can be of staff related as well as system related. The former one deals with shortage in manpower and latter one refers to hospital infrastructure, technology employed, etc. Longer waiting times in hospitals leave the patient resistant to turn up towards the same hospital next time. The present study would assist readers to gain knowledge about reasons for hospital delays and ways to overcome these delays. This study also spotlights upon dwindling delays and thereby enhancing patient satisfaction.

Key words: emergency, reputation, medical service, hospital image, infrastructure, delays and patient satisfaction.

INTRODUCTION

Waiting time or delay in health care usually denotes the time patient is waiting for getting treatment or patient waiting in the Course of treatment or patient waiting after the completion of treatment. This may encompass in-hospital patient delays as well as outpatient delays. The delays in hospitals may occur due to varied number of reasons. The lack of resources in hospitals is the predominant factor behind these postponed medical services. The paucity in beds causes inpatients to wait for a longer time which will influence deferred medical assistance for patients and delay their admission procedure in the hospital. Poor infrastructure may mislead the patients and make them roam around

hospital, thereby increasing their time spent in hospital excluding medical treatment. A queue system which is indecorous drives towards hindered treatment process in hospitals. Highly deficient health-care professionals will result in deteriorated health care service to patients. Every hospital must possess properly constructed and arranged registration cum billing facilities to dodge unnecessary delays for patients while they are entering and leaving hospitals. The tests taken in laboratories, radiology department and initial vital signs examination should be done in a shorter time to diminish patient waiting time. This study focuses on the grounds behind hospital delays through fifteen elements such as insufficient registration facilities, poor infrastructure, improper scheduling of patients, inadequate healthcare professionals, laboratory tests, imaging and radiology examinations, unsuited discharge planning, incompetent billing facilities, lack of proper queue system, physician decision making, duration for consultation, clumsy signage boards, vital signs examination, dispatch of reports and communication regarding further treatment.

REVIEW OF LITERATURE

Youssef et al. (2017) demonstrated the determinants behind hospital delays with respect to patients suffering from coronary syndromes and are admitted in tertiary care. This research is done by recording time delays between onset of 315 patient's arrival due to acute symptoms and their discharge. It is found that pre hospital delays are patient related and post delays are due to healthcare resources.

Kuhrij et al. (2019) investigated the dependent hospital factors responsible for hindering treatment in patients with carotid interventions. The analysis is conducted for 14 days comprising of 8620 patients with carotid stenosis. The implications of this study express that the indirect referrals are the causes behind longer waiting times in hospitals.

Gruyter et al. (2019) explained the estimation of socioeconomic effects on minimizing the delay times in hospitals across Australian patients with symptoms of heart attack. This research employs cost benefit analysis for demonstrating the costs incurred and benefits obtained as a result of prolonged delays in hospitals. As per the study campaigns will help in generating awareness among public which will dodge the delays in hospitals.

Safavi et al. (2019) implied that non clinical delays are specifically due to raised length of stay in hospitals and extended progression of care. These non clinical delays remain as a customary constrictor. This can be even due to transfer delays of patients from one department to another. The study recommends that advanced care should be employed to dodge the hospital delays.

Xu et al. (2019) elucidated the facts behind delayed radiotherapy treatment. It is found from the study that using failure modes remain as a reason for these types of delays. An effect analysis is developed to sort out the issues related to hospital delays. The study puts into limelight that appropriate treatment planning would evade longer delays in radiotherapy treatment.

Kanwal et al. (2018) clarified the concerns relating to causes of delays with respect to fetal echocardiography employed at hospitals providing tertiary care. The data was collected from 200 pregnant females. It is figured out from this research that referral personnel are responsible for delayed presentation.

Nehme et al. (2018) explored about the time delays that exist between onset of acute symptoms and revitalising of emergency services. This research depicts that the time delay was about 25 minutes leading to higher arrest rhythms among patients. This may eventually result in curtailed survival of cardiac patients. Therefore, public must be created awareness about warning symptoms to increase the survival rate.

Paul and Isaac (2018) estimated the effects of surge delays for hip fractures. The study incorporated 144 patients greater than 60 years who are primarily diagnosed with hip fracture. The implications of this study make it evident that the prolonged time in fracture of hip surgery direct towards elevated risk of hospital mortality rate.

Pilkington et al. (2019) identified certain barriers that hinder the treatment provided to patients. This research employed interview method and took 8 months for complete collection of data. The survey comprised of 174 patients. It is identified that out of 90% patients only 14% patients obtained treatment. Therefore, they must be educated to seek care immediately.

Gebhard et al. (2019) highlighted the consequences of summer season towards pre hospital delays in primary health care centres. The summer effect causes delay in treatment of myocardial infarction. Also the temperature modifications influence the treatment of men and women causing excessive risk for peri-procedural events.

CAUSES FOR HOSPITAL DELAYS

The principal intention of current study directs towards estimating the reasons behind delayed hospital services for patients along with the approaches to avert these delays. This is employed with the assistance of a questionnaire comprising of factors causing hospital delays. The sample size is 150. The respondents include patients of different hospitals. The demographic outline for this current study

embodies age of patients, gender of patients and educational qualification of patients. The frequency scrutiny with respect to demographic outline is shown in table 1.

Table 1: Frequency Scrutiny of Patients’s Demographic Outline

Gend-er	Frequency	%	Age in yrs	Frequency	%	Qualifica-tion	Frequen-cy	%
Male	85	56.7	< 25	67	44.7	UG	71	47.3
Female	65	43.3	25-35	15	8.7	PG	31	20.7
Total	150	100	>35	68	46.6	Others	49	32.0
			Total	150	100	Total	150	100

It is manifested from obtained frequency table that respondents majority are male (56.7%) belonging to age group greater than 35 years (46.6%) and are undergraduates (47.3%). Table 2 provides details regarding the investigation of mean in order to find foundations for hospital delays with respect to patients perception. This is performed with the help of likert’s scale.

Table 2: Investigation of Mean with respect to Patients Perception

S.N o	Patient Perception about Causes for Hospital Delays	Mean	Rank
1	Insufficient registration facilities (Registration)	3.21	15
2	Poor infrastructure (Infrastructure)	3.66	13
3	Scheduling of patient leading to longer waiting time (Waiting Time)	3.54	14
4	Inadequate health care professionals (Lack of Staffs)	3.95	7
5	Laboratory tests (Lab)	3.75	12
6	Imaging and radiology examination (Radiology)	4.05	4
7	Improper discharge planning (Discharge)	3.80	10
8	Incompetent billing facilities (Billing)	4.11	1
9	Lack of proper queue system (Queue)	3.82	8
10	Physician decision making (Physician)	4.10	2
11	Duration for consultation (Duration)	3.81	9

12	Inability to understand signage boards to reach specific departments (Signage)	4.03	5
13	Vital signs examination (Physical Exam)	3.77	11
14	Dispatch of report (Reports)	4.08	3
15	Communication regarding further treatment (Communication)	3.98	6

Table 2 depicts the inquiry of mean with respect to patient perception about causes for hospital delays. It is elucidated from mean analysis table that the extreme mean value shows mastered by Incompetent billing facilities. Therefore, we can assume that the patients believe that poor billing facilities are the major determinant for hospital delays. Table 3 discloses the confederation among causes for hospital delays through factor analysis.

Table 3: KMO and Data Minimization analysis

Measure of Sampling Adequacy (KMO)		0.777
Chi Square (Approx)		1548.905
Significance		0.000
Rotated Sums of Squared Loadings	Total	Cumulative Variance
	3.187	21.427
	3.064	41.675
	2.714	59.765
	2.117	73.882

Table 3 presents the Kaiser - Meyer - Olkin analysis and illustrates that data obtained is sufficient for conducting factor analysis. The explained total variance illustrate variances with respect to components. It is conspicuous from table 3 that 15 causes are agglomerated into four components and all together they elucidate 73.8% of variance.

Table 4: Agglomeration of Causes as Components

S.No	Causes	Component	
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		1	2	3	4	Component Name
1	Registration	0.822	-	-	-	Documentation
2	Billing	0.778	-	-	-	
3	Reports	0.752	-	-	-	
4	Infrastructure	0.612	-	-	-	
5	Waiting Time	-	0.783	-	-	Resources
6	Lack of Staffs	-	0.773	-	-	
7	Queue	-	0.743	-	-	
8	Physician	-	0.693	-	-	
9	Duration	-	0.682	-	-	
10	Signage	-	-	0.812	-	Tests
11	Lab	-	-	0.727	-	
12	Radiology	-	-	0.710	-	
13	Physical Exam	-	-	0.659	-	
14	Discharge	-	-	-	0.903	Rapport
15	Communication	-	-	-	0.752	

Table 4 establishes the agglomeration of four components on the basis of patient perception about causes for hospital delays. Table 5 displays ANOVA test which is done to test the difference of opinion in perception of patients with respect to demographic profile like age and qualification.

Table 5: Demographic Profile Vs their Perception

S. No.	Demographic Profile Vs their Perception	F	Sig.
1	Age Vs Documentation	2.145	0.121
2	Age Vs Resources	0.002	0.997
3	Age Vs Tests	2.095	0.127
4	Age Vs Rapport	0.926	0.396

5	Qualification Vs Documentation	4.741	0.003
6	Qualification Vs Resources	2.936	0.350
7	Qualification Vs Tests	1.860	0.139
8	Qualification Vs Rapport	0.362	0.781

From table 5, it is inferred that the significance level are higher than 0.05 except for qualification vs documentation. It denotes that there is no differentiation in the perception of patients with respect to reasons for hospital delays such as documentation, resources, tests and rapport but there is a slight difference of opinion among different people qualification with respect to documentation.

CONCLUSION

Prolonged delays in hospitals for sure will direct towards dissatisfied patients and thereby decreases the patient flow to hospital. This should be completely avoided to deliver patient service. The hospitals can employ automatic processes and techniques to speed up medical procedures, thereby the delay time can be subsequently reduced. Prioritisation and scheduling of treatment activities must be done to perform threatening life treatments first followed by minor treatments. Seasonal clinics can be allowed during rainy climate for fever, etc. This will dodge the patients waiting with regular diseases. All these essential steps would perhaps help the hospitals to provide better service quality to patients and grasp more patients.

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