

Original Research Paper

Management

A STUDY ON HOSPITAL BED UTILIZATION IN A TERTIARY CARE HOSPITALS

Geethu K.G

Student, MBA in Hospital Management, Annamalai University, Chithambaram, Tamilnadu, India Corresponding Author

N. Junior Sundresh

Associate Professor of Surgery, Raja Muthiah Medical College, Annamalai University, Chithambaram, Tamilnadu, India

ABSTRACT

Introduction Aim: The present study sought to survey the perception of healthcare professionals towards the bed utilization in a Tertiary Care

Methods: The data were collected using a researcher-made structured questionnaire. The responses were quantified on 3-point Likert type scale where 3 was taken for "Agree", 2 for "Can't say", and 1 for "Disagree".

Results: The majority of the doctors (83%) believed that patient stay in the hospital is longer than standard. The agreement on such factors as complete satisfaction of patients' needs, large number of beds, inability of family members to take care of patients, and uncooperative attitude of patients contributing to bed over-utilization was low (11-39%).

Conclusion: According to our results, implementation of quality assurance system in ward management, revising admission and discharge policy, improving hospital information system, use of modern technology, providing clear-cut job description, and providing the clinicians with appropriate training may help alleviate the patient overstay and suboptimal utilization of resources in hospital.

KEYWORDS: Hospital bed utilization, Patient overstay, Hospital management

INTRODUCTION

Hospital costs are the largest component of health expenditure and they have therefore been a key focus in the drive for increased efficiency in the health sector (1). In an era of increasing costs and population with consequent strain on resources it becomes imperative to utilize the suitable healthcare resources to the maximum possible extent. Given the disparity between the population and the available medical facilities, a suitable bed is a scarce commodity indeed in the Indian context. This assumes significance in light of the fact that availability of beds is the most important factor when it comes to the determination of hospital resources in any country. In India shortage of beds is indeed a huge problem considering that the average bed population ratio is 6.8:10000 (2).Moreover the cost of making available a new bed varies between Rs. 50,000 to Rs. 100,000 and then there are additional costs of maintenance to be considered so as well (3). Scarcity of beds is further compounded by the underutilization of hospital resources. Hence efficient bed management not only helps to make up for the paucity of beds to some extent but also brings about significant financial benefits in its wake.

AIM

The present study sought to survey the perception of healthcare professionals towards the bed utilization in a Tertiary Care

MATERIALS AND METHODS

The data were collected using a researcher-made structured questionnaire. Each unit was visited in person by the principal researcher after taking due appointment from the participants. The confidentiality of the information was assured by collecting the completed questionnaires directly into a box. The responses were quantified on 3-point Likert type scale where 3 was taken for "Agree", 2 for "Can't say", and 1 for "Disagree".

RESULTS

A total of 4 clinicians, 15 nurses, 16 other healthcare professionals were participated in this survey. The majority of the doctors (83%) believed that patient stay in the hospital is longer than standard. The agreement on such factors as complete satisfaction of patients' needs, large number of beds, inability of family members to take care of patients, and uncooperative attitude of patients contributing to bed over-utilization was low (11- 39%). However, age and socioeconomic status of the patients were perceived to be prime contributors to their overstay (65-84.6%).

Table 1

Characteristics of the respondents		
Doctors	tors 11%	
Nurses	43%	
Others	46%	
Age	38±12.2 years	
Work Experience	3±2.1 years	
Specialty Ward	58%	
Super specialty Ward	42%	

Table 2 Perception of the respondents towards factors potentially affecting hospital bed utilization

Factors		Percentage
Patie nt-	Fulfillment patients' needs	52%
relat ed	Large number of hospital beds	39%
	Inability of family members to take care of the patients	27%
	Patient's uncooperative attitude and refusal to discharge	63%
	Seriousness of patient conditions	76%
	Socio-demographic characteristics of patients	91%
Physi	Expertise of doctors	79%
relat ed	Reputation of the health center as a research and teaching institute	70%
	Little autonomy of junior doctors to discharge patients	86%
	Lack of training/clear cut job description	93%
	Long duty hours	95%
Adm inistr ation -relate ed	Lengthy admission and discharge procedure	71%
	Lack of appropriate admission and discharge policy	94%
	Inefficient hospital information system	80%
	Lack of standard operating procedure (SOP) in ward management	77%
	Lack of quality assurance department	69%
	Hurdles in mode of payment	46%

The results of the present study showed that a large fraction of healthcare providers perceive that hospital beds are inappropriately

utilized. The agreement on the importance of patient-related and physician-related factors as contributors to patient overstay was significantly higher among the doctors compared with the nurses. However, both groups gave a comparable emphasis to the role of administration-related factors. Contrary to the nurses, most of the doctors perceived that longer patients stay than standard in the surveyed hospitals, indicating that the doctors were more aware of the inefficient hospital bed utilization compared with their nursing counterparts. The agreement on such factors as complete fulfillment of patients' needs, uncooperative attitude of the family members, and availability of large number of beds having large contribution to overstay was low. Most of the respondents agreed that quality services, high status of doctors, reputation of Institution, and limited autonomy of doctors, as perceived by the public, are important contributors to patients overstay in hospital.

CONCLUSION

In this study, we evaluated the relative importance of factors potentially contributing to hospital bed over-utilization, including patient-related, physician-related and administration-related factors, as perceived by the doctors and nurses in a healthcare facility of national importance in India.

REFERENCES

- L Lewellyn-Davies R, Macaulay HMC, Hospital Planning and Administration, WHO Monograph series No 54, Geneva, New Delhi: Jaypee Brothers, 1995.pp.35
- Park K. Text Book of Preventive and Social Medicine.17th Ed. Jabalpur, M/S Bhanarasidas Bhanot, 2002.pp.616
- Thapa V, Saha JB, Lahiri SK, Sarwar GN. An evaluation of bed management in a rural hospital adjacent to Indo-Nepal border in West Bengal. Indian J of Public Health 2002; 46(2):57-60
- 4. Tripathi GD, Maximum utilization of Hospital bedsNIHAE Bull 1997;10;3:215,315-321.
- 5. Kiran ER, Vijaya K. Utilization of Beds in a tertiary care Hospital. Journal of Assoc of Hospital Adm 2004; 15(2): 13-17.
- Vaz F S, Ferreirs AM, Kulkarni MS, Motghare DD. Bed utilization indices at a Tertiary care Hospital in Goa: An eight year trend Analysis. Indian J of Public Health 2007,51(4):231-233
- Anand TR, Hospital Services and Management Methods. Background reading material for training course in Hospital Management. New Delhi, 1982. pp.6
- Alonso MA, Anto JM. The Appropriateness evaluation protocol Group of the Hospital University del Mar using length of stay and inactive days in the hospital to assess appropriateness of utilization in Barcelona Spain. J Epidemiology Community Health 1996; 50; 196-201.
- Saha JB, Mitra J, Mondal A. Length of stay of inpatients in a gynecological ward in a sub divisional hospital in West Bengal. Indian J of Public Health 1991;35(3):71-74.
- 10. Cohan CF. hospital expenses rise faster than overall CPI. Hospital 1980;54:59-62
- 11. Dutta S, Biswas R, Lahiri A. A study of bed utilization in the gynecological ward of a District Hospital in West Bengal. Indian J of Public Health 2005; 49(4): 263-264