

Original Research

Patients' perception of physical aspects of an Emergency Assessment Unit: a questionnaire study

T Mahmood

Abstract

Objective: To explore patient's perceptions regarding the physical environment of an Emergency Assessment Unit (EAU).

Design/Setting: Questionnaire study at the time of discharge from the EAU of a UK District General Hospital

Participants: All patients who were admitted through the EAU for three consecutive days.

Results: Availability of modern facilities, close proximity to home and cleanliness were considered important parameters by <75% of patients. More than half of the patients considered presence of quiet space, good ward aesthetics and hospital food, provision of telephone and television facility, good ward security and ample hospital parking to be important aspects of an EAU.

Conclusions: Patient views should form a key part of design when considering the physical environment of an EAU.

Background

Emergency Assessment Units (EAUs – also termed Acute Medical Units) provide the portal of access into most UK hospitals for patients admitted as emergencies. However there are limited data available on the physical environment and building structure required for this model of care. The rapid patient throughput in an EAU differs considerably from that of most hospital wards, and requires specific structural considerations. In considering the appropriate design it is important to consider the views of all stakeholders – including those of the patients using the service.¹

The importance of physical environment of a ward has been investigated in Mental Health Units and the Psychiatric wards.² However it is unclear to what extent the findings of these studies can be extrapolated into the setting of an EAU. Furthermore it is important that the patient's opinion, as the main stakeholder in healthcare, should be considered in shaping the ward environment.

Aims and Objectives

This study aimed to explore views of patients regarding the physical environment of the Emergency Assessment Unit (EAU).

Methods

The study was conducted in Emergency Assessment Unit of a district hospital in South London. This hospital caters for a population of approximately 300,000 and the Acute Assessment Unit admitted approximately 80 new patients each week at the time. The Unit had 20 rapid assessment beds taking admissions directly from general practitioners as well

as the Accident and Emergency department either through A&E staff referral or more often after evaluation by the medical registrars. The patients could stay a maximum of 24 hours in this section of the EAU. If patients needed to stay in the hospital longer than 24 hours, but shorter than 48 hours, then they could be kept in the short stay area of the EAU consisting of another 20 beds.

All patients admitted to the Emergency Assessment Unit of this district general hospital over a 3 day period were given a questionnaire at the time of discharge (See Figure 1). The patients could either hand return this questionnaire to the ward staff in a sealed envelope or post it back in a stamped envelope provided to them.

The questionnaire was hand delivered or posted to the participants along with a self addressed and stamped envelope. All participants were assured confidentiality and their privacy was respected. The data were computerised and statistically analysed using the SPSS statistics package.

The questionnaire used a Likert Scale to measure scores from 1 to 5 in order of increasing favourability running from 'strongly disagree', 'disagree', 'uncertain', 'agree' and 'strongly agree' with the opening statements. The data were analysed in two steps. First descriptive statistics were used to measure statistical trends and central tendency. Secondly the sample data were analysed to determine how well they represented the population by calculating the statistical significance using a null hypothesis. The hypothesis was that there is no difference between these variables of physical environment of the EAU. If the null hypothesis would be rejected, it would imply that statistically significant differences were found between variables and patients value each aspect of the physical environment of EAU separately. The Friedman Test for non-parametric, categorical data analysis was used.

The questions used on the questionnaire are summarised in Figure 2. The NHS research and ethics internet site (COREC) deemed this study not to require any approval because it is classed as a service review. The hospital Medical Director approved data collection and utilisation for the purpose of research. However he requested that anonymity of the Trust be maintained by not mentioning the precise location where the study was undertaken.

Results

Thirty questionnaires were distributed to patients; 26 responses were received, giving a response rate of 86.6%. Results are graphically represented as bar charts (Figure 2, page 43); statistical analysis is summarised in

Dr Tariq Mahmood
Consultant Physician and
Gastroenterologist

Correspondence:
Dr Tariq Mahmood
Consultant Physician and
Gastroenterologist
92 Long Lane,
Ickenham,
Middx,
UB10 8SX
Email: tm123@
btinternet. com

*Patients' perception of physical aspects of an Emergency Assessment Unit: a questionnaire study***Figure 1: Questions asked on the patient questionnaire**

1. If you were given the opportunity to go to your preferred Acute Assessment Unit, to what extent do you agree that the following characteristics are important to you in order to make your choice?

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
a. Unit with most modern facilities					
b. Unit nearest to your home					
To what extent do you agree that the following physical environmental conditions are expected from Acute Assessment Unit?					
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
a. Cleanliness					
b. Quiet atmosphere					
c. Aesthetic surrounding					
d. Quality of food					
e. Provision of television					
f. Access to telephone					
g. Internet access					
h. Security					
i. Adequate car parking facilities					

figure 3.

The Friedman test was used to demonstrate how patients categorise individual aspects of the physical environment of the EAU. The mean rank for cleanliness was highest at 8.62 followed by proximity to home at 6.58 and modern facilities at 6.52. The provision of television and internet access were ranked the lowest with scores of 5.21 and 3.31, respectively. The differences achieved statistical significance at $p < 0.001$.

Discussion

This was a small study conducted over a short period in a single, small EAU; however despite these limitations, some important messages are apparent. We have shown that more than three quarters of the patients consider modern facilities, close proximity to home and cleanliness to be important aspects of an Emergency Assessment Unit. Furthermore, over half of the patients who responded considered the presence of quiet space, good ward aesthetics and hospital food, provision of telephone and television facility, good ward security and ample hospital parking to be important. All of these areas need to be considered by hospital planners in the future designs of admitting areas. Internet facilities were considered important by a smaller proportion of patients, which may be a reflection of the age group of medical patients admitted as emergencies. These differences were shown to be statistically significant.

The strongest message from patients is related to cleanliness, with 76.9% patients considering this 'very important'. This may, in part at least, be a reflection of the

References

1. Leman P. "Emergency care in first 48 hours". *BMJ* 2007; **334**: 218–9.
2. Chaplin R, McGeorge M, Lelliot P. "The national audit of Violence: inpatient care for adults of working age" *Psychiatric Bulletin* 2006; **30**: 444–446.

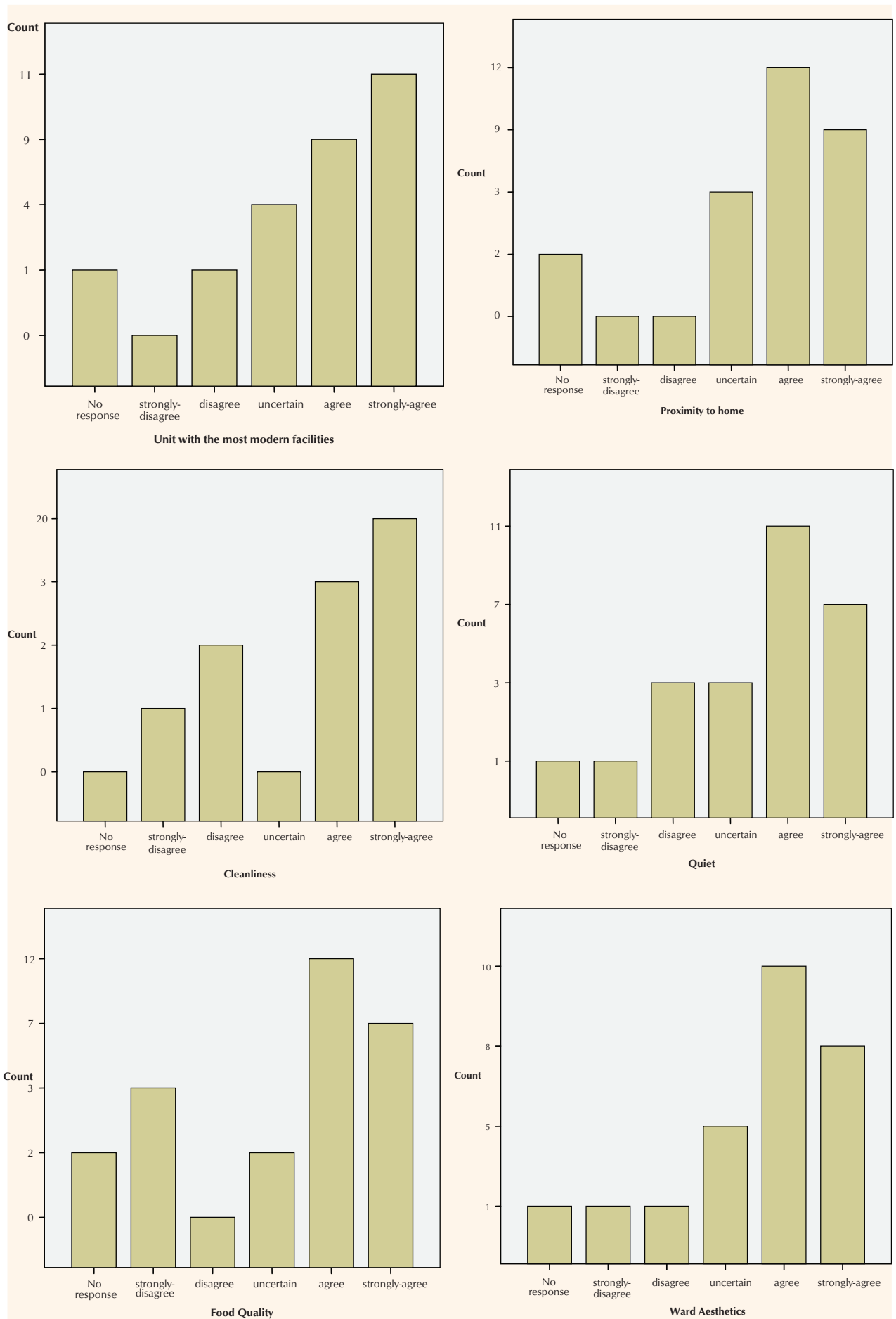
RANKS	
	Mean Rank
Modern facilities	6.52
Proximity to home	6.58
Cleanliness	8.62
Quiet Atmosphere	5.79
Ward Aesthetics	5.87
Food quality	5.52
Provision of television	5.21
Provision of telephone	6.10
Provision of Internet access	3.31
Security	6.44
Adequate Parking facilities	6.06
TEST STATISTICS(A)	
N	26
Chi-Square	53.683
df	10
Asymp. Sig.	<.0001

Figure 3. Statistical analysis.

degree of recent Press coverage afforded to the problems of Healthcare Associated Infections (HCAIs). The impact of HCAIs may be particularly relevant in the EAU, where the acuity of illness and turnover of patients is greater than elsewhere in the hospital.

Availability of adequate parking facilities were considered important by 42.3% patients. With the move to consolidate acute hospital services onto bigger sites, patients will find parking even more difficult unless it is thought through carefully at the time of building construction.

Patients' perception of physical aspects of an Emergency Assessment Unit: a questionnaire study



Patients' perception of physical aspects of an Emergency Assessment Unit: a questionnaire study

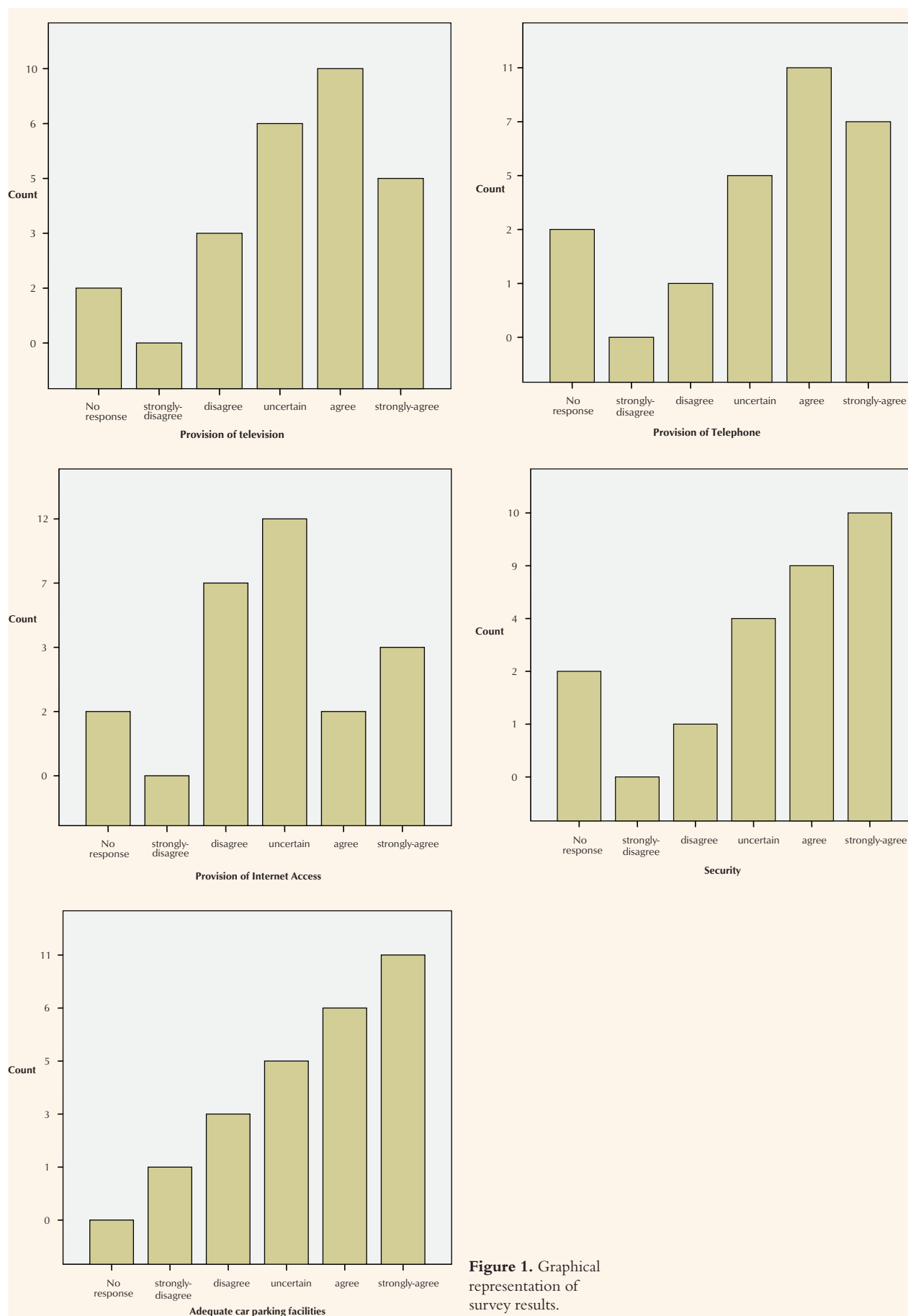


Figure 1. Graphical representation of survey results.