Satisfaction of inpatients in Erbil teaching hospitals

Received: 18/1/2011 Accepted: 13/9/2011

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Abstract

Background and objectives: It is often felt that developing countries need to improve their quality of healthcare provision. The aim of this study was to identify the satisfaction of patients about different aspects of hospital health care services, and to build a solid database for future health care planning, guiding of health policy, and monitoring health care quality.

Method: A cross-sectional study was carried out in Erbil teaching hospitals from November, 15th 2010 to January, 15th 2011. A convenience sample of 720 patients was obtained. Data were obtained by a direct interview using an anonymous questionnaire designed by the researcher. A measurement scale (Likert scale) for satisfaction was used.

Results: The mean ± SD age was 43.98 ±13.48 years with a male: female ratio of 0.61:1. The overall satisfaction rate was 73.2%, and the rate in Erbil, Rizgary and Maternity teaching hospitals were 63.8%, 75% and 80.8%, respectively (P<0.001). Binary logistic regression analysis revealed that there was significant association between age (OR= 1.068), years of formal education (OR= 0.742) with the overall satisfaction, and female patients were significantly more satisfied than males (OR=2.342).

Conclusion: The satisfaction rate increased with age and there is inverse association between the satisfaction rate and educational level of patients.

Keywords: Overall satisfaction rate, Inpatient care.

Introduction

Patient satisfaction has increasingly been viewed as an important health care outcome and has been used as a measure of quality of care in different health care settings.[1] Provision of services in line with the wishes and needs of patients is central to a humane health care system. Society has long acknowledged the importance of the views of public in developing the very services provided to them [2] and in the case of the health care system, patients have been found to be aware of health issues to the extent that they have been described as "expert witnesses" to the health care process.[3, 4] Hence over the past decade there has been increasing realization of the need to take into account patient reports of their hospital experiences in the development of action plans for improvement of services, safety and care provided. It is suggested that efforts to improve health care will be wasted unless they reflect what patients want from the service.[5] Patient satisfaction has been defined as the degree of congruency between a patient's expectations of ideal care and his or her perception of the real cares he or she receives.[6] It is a perceptional process that is sometimes associated with several socio-demographic variables, such as age, sex, the level of education, employment, income or marital status.[7, 8] Therefore, patient satisfaction is a subjective perception from the patient's point of view that caregivers can regard as reality, even though this perception may disregard the appropriateness of therapies and outcomes of the patient's health status.[9, 10]

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Despite the fact that patient satisfaction forms one of the main goals of the health care system, no studies evaluating inpatients' satisfaction as an important indicator for outcome quality have been conducted in Erbil city. Therefore, the aim of this study was to identify the satisfaction of patients about different aspects of health care services in Erbil teaching hospitals, and to build a solid database for future health care planning, guiding of health policy, and monitoring health care quality.

Method

A cross sectional study was carried out in Erbil teaching hospitals in Erbil governorate, from November 15th, to January 15th, 2011. A convenience sample of 720 patients (240 patients in each hospital) residing in Erbil governorate admitted at Rizgary, Erbil and Maternity teaching hospitals during the above period was included in the study. The official permission for carrying out this study was obtained from the general directorate of health (DOH) of Erbil and from the directorates of Erbil teaching hospitals. Verbal informed consent was obtained from all patients and they were assured that their participations are voluntary and their responses would be anonymous and confidential; there were no identifying questions (name) on the questionnaire. Data were obtained by a direct interview (by the researcher) of patients using a specially designed questionnaire (after carrying out a pilot study, those who participated in the pilot were excluded from the study). Data requested consisted of two sections; first, socio-demographic included: age, gender, marital status, home ownership, family income, and years of formal education, occupation and type of ward. The second section, inpatients' satisfaction questionnaire included: Friendship of doctors and nurses, daily examination, giving instructions by doctors, privacy, hand washing or wearing gloves, availability of nursing staffs, drugs and investigations, cleanliness of hospital ward/ room and toilets/ bathrooms, and rating of hospital food and quietness. A measurement scale (Likert scale) for satisfaction of these items was used.[11] This scale consists of 5 grades: 1 for very unsatisfied, 2 for unsatisfied, 3 for fairly satisfied, 4 for satisfied and 5 for very satisfied. There were 15 questions, so the total score was 75 (100% satisfaction) and the least was 15 (20% satisfaction). Finally the overall satisfaction was asked by another question. Statistical package for social sciences (SPSS, version 15.0) was used for data entry and analysis. Chi square test of association, student t-test and binary logistic regressions were used for statistical analysis. P value of ≤ 0.05 was regarded as statistically significant.

Results

The sample included 720 patients (240 patients in each hospital); their mean ± SD age was 43.98 ±13.48 years (ranged from 20 to 78 years) with a male: female ratio of 0.61:1. The mean ± SD ages of satisfied and not satisfied patients were 48.72 ±11.63 and 31.04 ± 8.99 years, respectively (P<0.001). The mean ± SD ages of males and females were 41.62 ±14.73 and 45.43 ±12.47 years, respectively (P<0.001). Table (1) show that 73.2% of patients were satisfied with the provided health care in Erbil teaching hospitals. The proportion of overall satisfaction (84.1%) of female patients was higher than that (55.3%) of male patients (P<0.001). Table 2 shows that the majority of patients were satisfied with the hospital food (98.1%) and availability of investigations (92.9%), while the minority of patients was satisfied with hand washing or wearing gloves by doctors (18.2%) and by nurses (19.2%).

It is evident that the proportion of overall satisfaction in Erbil, Rizgary and Maternity teaching hospitals were 63.8%, 75% and 80.8%, respectively and these differences were statistically significant (P<0.001) as shown in Figure (1). Also it is shown in Figure (2) that the proportion of overall

satisfaction by patients admitted at maternity department (80.8%) was higher than that at medical (75.8%) and surgical (62.9%) departments (P<0.001).

Table 1: Overall satisfaction by gender of patients.

Gender	Overall satisfaction		Total No. (%)	X^2	P-value
	Satisfied No. (%)	Not satisfied No. (%)			
Male	151 (55.3)	122 (44.7)	273 (100.0)		
Female	376 (84.1)	71 (15.9)	447 (100.0)	71.675	< 0.001
Total	527 (73.2)	193 (26.8)	720 (100.0)		

Table 2: Patients' satisfaction by aspects of health care.

Aspects of health care	Patients' satisfaction (n=720)	
	Satisfied No. (%)	Not satisfied No. (%)
Doctor friendliness	575 (79.9)	145 (20.1)
Daily examination by doctors	548 (76.1)	172 (23.9)
Giving general instruction by doctor	513 (71.2)	207 (28.8)
Giving drug instruction	467 (64.9)	253 (35.1)
Privacy	467 (64.9)	253 (35.1)
Wearing gloves or hand washing by doctors	131 (18.2)	589 (81.8)
Wearing gloves or hand washing by nurses	138 (19.2)	582 (80.8)
Availability of nurse	560 (77.8)	160 (22.2)
Nurses' friendliness and courteousness	519 (72.1)	201 (27.9)
Availability of drugs	596 (82.8)	124 (17.2)
Availability of investigations	669 (92.9)	51 (7.1)
Cleanliness of wards/rooms	562 (78.1)	158 (21.9)
Cleanliness of toilets/bathrooms	379 (52.6)	341 (47.4)
Hospital food	706 (98.1)	14 (1.9)
Hospital quietness	581 (80.7)	139 (19.3)

Figure 1: Overall satisfaction of patients in Erbil teaching hospitals.

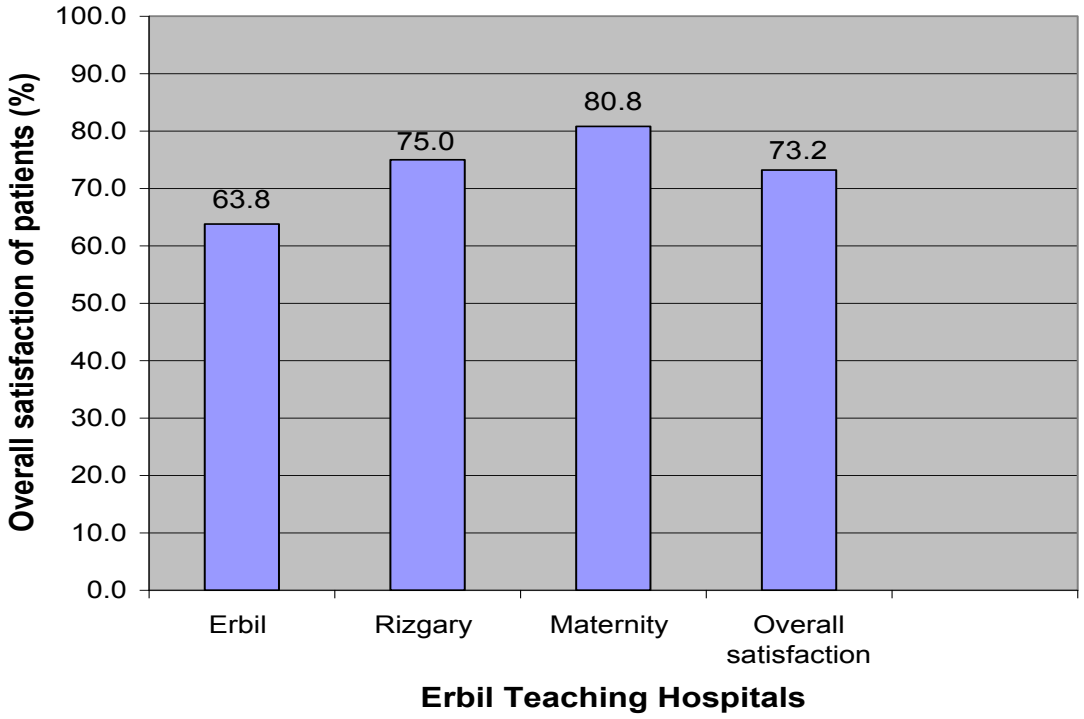
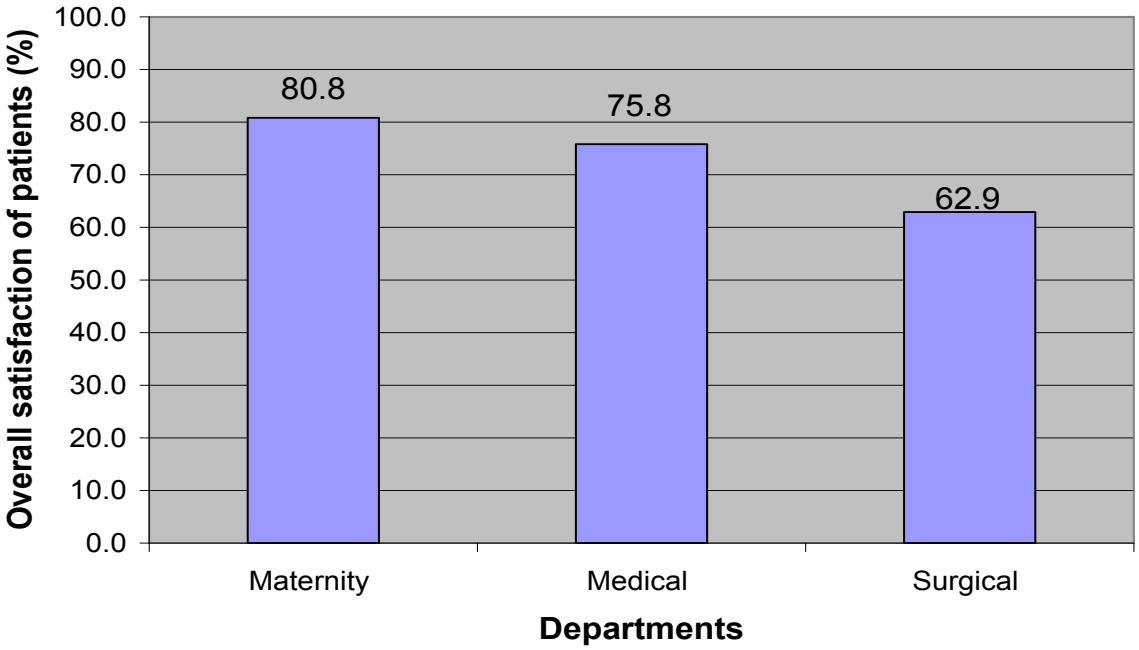


Figure 2: Overall satisfaction of patients by departments



Binary logistic regression analysis revealed that there was statistically significant (positive) association between age (OR= 1.068) and overall satisfaction, and there were statistically significant (negative) association between years of formal education (OR= 0.742), rented home (OR=0.062), partially owned home (OR=0.045), and occupation (retired) (OR=0.012) with the overall satisfaction. It is also revealed that female patients were significantly more satisfied than male patients (OR=2.342) as shown in Table (3).

Table 3: Binary logistic regression of socio-demographic factors patients' satisfaction.

Socio-demographic factors	β	SE*	P-value	OR**	95% CI† for OR	
					Lower	Upper
Age	0.066	0.025	0.009	1.068	1.016	1.123
Year of formal education	- 0.298	0.055	< 0.001	0.742	0.667	0.826
Sex (female)	0.851	0.379	0.025	2.342	1.114	4.923
Marital status†† (married)	0.511	0.523	0.328	1.667	0.599	4.644
Marital status (widowed)	1.799	1.130	0.111	6.043	0.660	55.358
Home ownership (rented)	- 2.786	0.479	< 0.001	0.062	0.024	0.158
Home ownership (partially owned)	- 3.112	0.527	< 0.001	0.045	0.016	0.125
Family income (enough)	0.041	0.442	0.927	1.042	0.438	2.477
Family income (exceed enough)	0.263	1.197	0.826	1.300	0.125	13.572
Occupation (employed)	0.033	0.463	0.942	1.034	0.417	2.562
Occupation (retired)	- 4.386	0.978	< 0.001	0.012	0.002	0.085
Constant	1.842	1.186	0.120	6.311		

*** Standard error ** Odds ratio † Confidence interval †† single was reference**

Discussion

Evaluation of the quality of health care is a complex and challenging process. Currently, there is an emphasis on the use of outcome indicators as a measurement of the quality of health care. Patient satisfaction is a category that has received attention as a useful indicator of the quality of care in consumer-driven health care systems. Measurement of patient judgments about quality of inpatient care and health outcomes is advancing rapidly worldwide, mainly for two reasons: First of all, patients are in an excellent position to evaluate certain aspects of the process of care. Secondly, learning about what consumers want from their health care system and what quality care means to them offers decision-makers a better understanding of their expectations.[12] Results revealed higher rates of patients' satisfaction about different aspects of health care provided in Erbil teaching hospitals, ranging between 18.2% and 19.2% (hand washing or wearing gloves by doctors and nurses, respectively) to 92.9% and 98.1% (availability of investigations and hospital food, respectively). The overall satisfaction of inpatients in this study was 73.2%, and the rate of satisfaction increase with age which is in agreement with findings of Al-Ameen and Al-Tawil, [11] Theodosopoulou *et al* [13] and Cohen.[14] Generally, older people are more satisfied with medical care. This is probably due to their greater continuity of doctor-patient relationships, and their lower expectations about patient involvement in care.[15] Unfortunately, there is no local published data on inpatients' satisfaction in Erbil city in order to, first, be compared with the data of the current study, and second, to follow the satisfaction rate of inpatients about health care provision. Therefore, this study is the first study to take into consideration the satisfaction of inpatients in Erbil city. The rate of satisfaction in female patients in this study was significantly higher than in male patients, this might be due to the older age in females. This result is consistent with the findings of Al-Ameen and Al-Tawil, [11] and inconsistent with others.[16, 10] In 2002, Crow *et al* analyzed the results of 39 studies and reported that a firm conclusion about the relationships between reported satisfaction and gender cannot be drawn.[17] Results showed that the rate of satisfaction among patients with rented home and partially owned home was lower than those with owned home; this could be attributed to the fact that patient without owned home had lower income. Poor people have poorer health, get poorer health care, have less continuous relations with doctors, and have harder times getting appointments. Consequently, they tend to be less satisfied.[15] Also it revealed that there is inverse association between the satisfaction rate and educational level of patients. Educational level may influence patient satisfaction is supported by the findings of Hall and Dornan, who concluded after a meta-analysis that greater satisfaction is associated with less education.[18] It is suggested that more educated patients have a tendency to be less satisfied because they have higher expectation or apply stiffer standards in their evaluation of care and are consequently disappointed compared to less educated patients.[11] Studies done by Powers *et al*[19] and Chang *et al*[20] show demographic characteristics such as age and sex and the socio-economic status (education, employment, income, marital status) to be generally related to patient satisfaction. Studies carried out in Eastern European countries reported similar results.[13] Maternity and gynecology as a department and hospital had more satisfied patients than average, this is might be due to that patient integrity and discussions with the patient are of a more sensitive nature in gynecology compared with other specialties, and that this might result in a more satisfied patient.[21] In this study, the degree of dissatisfaction with the cleanliness of the wards and the bathrooms were 21.9%, 47.4%, respectively, which are higher than the findings of Imam *et al*[12]. Finally, 1.9%

of patients were not happy with the quality of hospital food provided to them, which are better than the findings of Imam *et al*,[12] but nevertheless a number that still needs improvement. The hospital provides standardized food to all patients along with special diets for patients with special needs. Impact of quality consciousness in all sectors of life has augmented the need for healthcare facilities and institutions to keep themselves aware of the needs and expectations of their customers and end users. 'Customer satisfaction' has taken on new and greater significance in health-care delivery in the last decade. It is increasingly being recognized that the patients' feedback is a more important indicator of quality of healthcare compared to the view of clinicians and is valuable for the hospital managements as a tool for their budgetary planning as well as a guideline for instituting measures to improve quality of services.[22] In conclusion, nearly three quarters of patients were satisfied with the provided health care services in Erbil teaching hospitals, the satisfaction rate was increased with increasing age. Finally this study hopes to generate data that can help health authorities and doctors to improve the standard of care they provide in line with the wishes of the patients.

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