ORIGINAL ARTICLE

Surgical patient satisfaction: nursing care quality index

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ABSTRACT

Introduction: Patient satisfaction is a quality indicator for the health services provided by a hospital, and also the principal method for the evaluation and feedback of the system used for measuring quality of service.
The objective of this study was to estimate the level of the services offered by the General Hospital of Sparta and the investigation of patients' satisfaction before and after their treatment. Moreover, the current work was intended to investigate whether the specific demographics of respondents, such as gender, age, place of residence and their level of education affect their satisfaction about the services, provided by the nursing staff during their stay in the hospital.
Material and Method: The sample of this study was 93 patients, hospitalized in the Surgical Department. The collection of the questionnaires was conducted by personal interviews. As research tools, the Scale of measurement of patient satisfaction about nursing care (MPSS) was used in addition with questionnaire with socio-demographics evidence. In order to perform the statistical analysis, the statistical software SPSS 14.0 was used.
Results: The majority of patients in the sample were women (51.6%). Their educational level was relatively low, since approximately 31.5% rate of the participants had only compulsory education. 47.3% of patients described that their state of health is a small degree of serious while only 7.5% of patients responded that it is very serious. The effectiveness of public hospitals in Greece was considered as good by the 71% of the participants and as very good by the 22.6% of them.34,4% of them stated that they were very satisfied with the assistance given to them by the nursing staff regarding their everyday needs, such as personal hygiene, dressing and creating a comfortable environment. The 31,2% of patients were very satisfied about the help, provided by the nursing staff while 28% of patients were extremely satisfied. Five people (5,4%) replied that stayed in a small extent satisfied, while just one person (1,1%) replied that the help of nursing personnel for the daily needs was not satisfied at all.

Conclusions: Although the study has highlighted some problems and some areas needing improvement, the overall picture is very positive for the General Hospital of Sparta to the extent that the largest percentage of patients was satisfied with the provided services. The information process seems to be improved, since it is an important moral and legal right of patients. The measurement of patient satisfaction should be continued in order to allow comparisons and evaluation of the impact of various interventions in its modulation.
Keywords: Patient satisfaction, quality, nursing care, health services.

INTRODUCTION

In the competitive environment of the health care system, there is an increasing interest on the assessment and the measurement of the quality of the provided health care services. Despite the fact that, in order to measure the quality of the provided health care services, the health care professionals have used many tools, the patient's satisfaction, remains one of the most reliable tools although the fact that some authors have questioned in the past the reliability of this tool, due to patient's lack of technical knowledge, psychological situation at the time of investigation, culture diversions and due to different perspectives between patients and health care professionals (Donabedian 1980,1982,1988; Walker and Restuccia,1984; Vuori,1987; Hall and Dornan,1988; Waltz et al.,1991; Greeneich et al., 1992).

So a number of authors have agreed in the past, that patient's attitudes over their treatment, should be taken seriously on account when the quality of the provided health care services is being measured and furthermore it has been agreed that one of the most important indicators for the measurement of the quality, is actually patient's satisfaction (Schulmeister et al., 2005; Zineldin, 2006; Zyga, 2010). These findings have led many hospitals to the direction of giving to their patients the opportunity to decide on their own the way they will be treated in terms of hospitality and be part of the decision making process (Cleary and McNeil, 1988; Megivern et al., 1992; Greeneich et al., 1992; Sitzia and Wood, 1997; Rao et al., 2006).

The purpose of the current research was to investigate the satisfaction of the surgical patients in a specific hospital, by answering questions on how much satisfied the patients are for the nursing care they get and to investigate potential correlations between satisfaction and other demographic data.

PATIENTS AND METHODS

This publication is a part of a master level dissertation conducted at the University of Peloponnese, Sparta Greece.

The study was an exploratory-descriptive research and was conducted between August 2011 and October 2011. Patient's population included 93 people hospitalized in the surgical wards of the General Hospital of Sparta, Greece. The collection of data was made by a randomized stratified method. For the conduct of the study, the authors used the Munich Patient Satisfaction Scale (MPSS) which has been weighed by Associate Professor Anastasios Merkouris. The study has been approved by the hospital's ethical committee (Merkouris 1999).

The assessment of the provided health care services concerned the nursing personnel and the Likert scale was used. The Likert scale included the following levels of satisfaction: 5: «not at all satisfied», 4; «just satisfied», 3: «fairly satisfied», 2: «very satisfied» and 1; «totally satisfied». At the end there was an open question where each patient had the opportunity to express his/her own opinion. Furthermore there was a custom made questionnaire, specific for this study, for the collection of the demographic data by face to face interview, after the patients have read the information booklet and signed the informed consent.

STATISTICAL ANALYSIS

Data were analyzed using SPSS 11.0 for Windows (SPSS Inc., Chicago, IL). Descriptive statistics, including mean, median, ranges, and standard deviation values, were calculated for all the continuous baseline demographic and clinical characteristics. Statistically significant correlations of the satisfaction, age, level of education were evaluated with the chi-square test (Pearson x2) and the Fisher exact test. A statistically significant correlation was demonstrated if the maximum likelihood ratio criterion had a P value less than. 05.

RESULTS

Ninety-three patients with a median of 4.37 (2 to 20) days of hospitalization were questioned in order to measure the level of their satisfaction. The median age was 49 (12 to 96) years old, where 51.6% were men and 48.4% were women. As it concerns their level of education, 31.2% were only primary school graduates, 23.7% high school and only 20.4% of them had graduated from a university.

RELIABILITY OF THE INSTRUMENTS

Before the statistical analysis of the data, the authors checked the reliability of the variables they used, with the Cronbach alpha (a) indicator, where the results showed a 0.964, which meant that the used data were highly reliable.

PATIENT SATISFACTION

Generally the patients found to be 28% totally satisfied, 31.2% very satisfied, 34.4% fairly satisfied, 5.4% and 1.1% just and not at all satisfied respectfully, as it concerns the care that the nursing staff offered them for their everyday needs (dressing, personal hygiene).

When the relationships between the patient characteristics (age, sex, length of stay, ward, and education) and patient satisfaction (MPSS) were examined, it was found that the MPSS score showed a correlation with the age (P = 0.029) gender (P = 0.030), and level of education (P = 0.004). The results of the multiple linear regression analyses of the data from the MPSS are shown in Table 1.

It has been found that the MPSS score was affected by the severity of the patient's condition, where the more serious were the patient's condition, the more satisfied where from the delivered care services by the nurses (P= 0.033). The same results found as it concerned the skills with which nurses perform all nursing procedures (P= 0.002) and in correlation with the food's quality (P= 0.002). The most severed ill patients would also prefer to be treated by the same nurses in compare to lees ill patients (P= 0.011).

The correlation between the days of hospitalization and patient satisfaction, showed also that there was statistically significant difference, whereas the patients who stayed longer, where very satisfied by the nursing measures against their pain (P= 0.000).

Furthermore statistically significant correlation was found, between the ward where the patients were hospitalized and their satisfaction. Patient's stayed at general surgical wards were more satisfied concerning the information that their relatives were receiving (P=0.005), and moreover they were more satisfied, concerning to be asked by the nursing staff for their informed consent before any treatment.

DISCUSSION

Almost all patients were satisfied with the care they received. These results correspond to the results of other studies which show that patients are, in general, satisfied with nursing care (Johansson, 2002; Alhusban, 2009). However, in many cases as in this study also, participants' comments suggest that patients might not be dissatisfied with nursing care and/or nurses per se, but rather with the circumstances under which care was provided. Nursing staff shortage, inappropriate facilities, housekeeping issues and allocation of nursing time to tasks other than patient care appeared to form a suboptimal caring environment, within which care could not always be sufficient for patients' needs (Merkouris, 2004).

When comparing wards, the results showed that participants in general surgical wards had higher level of satisfaction with nursing care than participants in orthopaedic wards; such a result is consistent with the findings of similar studies (Phi et al., 2002). A possible explanation for this result might be because of the fact that orthopaedic operations are more technical to be explained by nursing staff. Furthermore the kind of ward where the patient stays plays also a significant role to the satisfaction. Al-Kandari and Ogundeyin (1998) in a study population of 148 patients, concluded that surgical patients where more satisfied in compare with medical patients as it concerned their information and the areas of nursing responsibility.

The received information by the patients, in order to give their informed consent is a crucial factor for their satisfaction. In a literature review by Riitta Suhonen and Helena Leino-Kilpi (2004) the conclusion was that in most cases the patients are not satisfied by the load of information they get as it concerns their condition and treatment options, and the suggestion was that there is a need to put more emphasis on assessing and evaluating their individual needs.

Since the study was conducted in only one peripheral Greek hospital, the limitation that the researchers found

Table 1.
Patient characteristics and satisfaction (N=93)

Parameter	Field of interest	*P*
Age	Received information	0.005
	Showed respect	0.038
Gender	Recommend the ward	0.031
	Effective services	0.025
Education level	Help received	0.029
	Food quality	0.006

was the question if the results are comparable not only to international similar studies, but also to studies conducted in the same country, with the same health care conditions and system. The fact that the used tools were already had been evaluated in he past, helped towards the production of reliable results. So in terms of the variables used in order to measure patient's satisfaction, current study agrees with Merkouris (1996), that patients recognize as key factors of satisfaction, the information they receive, the environment and the satisfaction of basic needs. On the other hand patients in the sample expressed considerable dissatisfaction for nursing services on offer. At the same time, expectations were very low, for information, service and food and tried to justify their dissatisfaction with the frequent reference to lack of personnel, which considered as the main source of most problems. In another Greek study, 300 patients were questioned and the results showed that users of hospital services were satisfied with the medical and nursing care and less satisfied with the hotel services offered by the hospital, which can be improved with the contribution of an efficient and modern administration (Niakas and Gardelis, 2000).

Fitzpatrick indicates that age plays a key role in patient satisfaction with the elderly patients to report high levels of satisfaction. This may be due to low expectations of elderly patients or in diverse attitudes toward the elderly in everyday life and some values (Fitzpatrick, 1991).

CONCLUSIONS

Patients enrolled in this study were mostly women, average age 49 years, primary school graduates, who lived in a village, with an average length of stay in the hospital four days and mostly in the surgical clinic, without facing serious health problem and knowing enough about their health problems. From the statistical analysis above it was concluded that in general, patients surveyed were very and very much satisfied with nursing care. Also they featured on the effectiveness of the services offered by Greek public hospitals, as well. Therefore, it doesn't cause great surprise that the patients would like to take care of them the same nursing staff if they will need nursing care in the future and on the other hand, that would constitute a department or clinic to others thinking of the nursing staff.

RECOMMENDATIONS

Greater emphasis should be given in the future, to the quality of information received by the patient, to the tools that nurses should develop to measure patient satisfaction of nursing services with adequate psychometric properties and last but not least an effort to improve the food quality and the environment in terms of cleanliness and reducing of noise.

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APPENDIX

SCALE MEASUREMENT OF SATISFACTION OF PATIENTS WITH THE NURSING CARE (MPSS)

I would like after you think the care provided (to you and / or other patients) to tell us the answer that best expresses the degree of your satisfaction using the following scale:

Not at all satisfied	just satisfied	Fairly satisfied	Very satisfied	Totally satisfied
1	2	3	4	5

1. Help with everyday needs. Such as: personal hygiene, dressing, toilet, change position in bed, walking, eating, when you want water, linen, bed and break-up of a comfortable environment.	1	2	3	4	5
2. Nursing procedures or operations. Such as medication, injections, venipuncture, sera change, wounds or wound care, changing dressings, etc. Rate on: *α.* The skill with which nurses perform these procedures or operations. *β.* Consistency (in terms of hours to be done) by which nurses perform these procedures or operations.	1	2	3	4	5
3. Relief of pain. Application of measures by nurses to relieve pain (eg evaluation of pain, presence next to the patient, repositioning, administering medication, etc.).	1	2	3	4	5
4. Information. Information from the nurse: *a* guide for the unit, the section on the first day the patient comes into the chamber (space, routine, bell). *β.* for diagnostic and therapeutic procedures (preparation, when and what to do, results). *γ. relatives or other close contacts of the patient (eg for the patient and what they expect from them).*	1	2	3	4	5
5. Education - Instructions. Education - instructions from the nursing staff for the necessary care, both in hospital and after discharge.	1	2	3	4	5
6. Response-speed. *Α.* how quickly nurses responded to the call for help (bell - signal). *β. how quickly the nurses do to help.*	1	2	3	4	5
7. Available time. Time nurses spend on general care, compared to the one you think would be enough.	1	2	3	4	5

8. Continuity of nursing care. The nursing staff from day to day and from shift to shift the situation and know the specifics of each patient.	1	2	3	4	5
9. *Time for rest and sleep.* *α. measures implemented by the nursing staff to reduce noise (from other patients, visitors, staff).* *β.* selection of nursing staff hours or appropriate selection of the patient time to wake	1	2	3	4	5
10. *Cleanliness*. *α. room* *β. Public areas*	1	2	3	4	5
11. *Food*. *α. quality* *β. Choice of food (meeting of personal needs)* *γ. temperature* *δ. Way and time of serving* *ε. Help from nursing staff*	1	2	3	4	5
12. Kindness of nursing staff	1	2	3	4	5
13. Respect. Attitude of nursing staff show respect (eg, speech pattern, protection of exposure of the body, respect for diversity, etc.)	1	2	3	4	5
14. Interested - contact. Time nurses spent with patients to discuss, listen, understand their problems and to stand by them in difficult moments.	1	2	3	4	5
15. Personal preferences. Whether the nurse takes into account the personal desires (eg hours of food, cleaning, visiting, etc.)	1	2	3	4	5
16. Participation in care. *α. Opportunities it gives you the nursing staff to decide about your care.* *β. nurses seek authorization from the patient to perform any procedure or operation relating to caring*	1	2	3	4	5
17. Professionalism of the nursing staff.	1	2	3	4	5
18. Effectiveness. Overall, how satisfied are you by the nursing service and contribution to the betterment of the situation or not your health.	1	2	3	4	5

Please fill in the following information:

Hospital ..... **Ward:** .....

Age:.....(years). **Days of stay:** .....

Gender: male ❒ female ❒ **Residence:** city..... village.....

Level of education: elementary ❒ high school ❒ college ❒ university ❒

How serious you consider your condition: not at all ❒ fairly ❒ very ❒ too ❒

I know for my condition: nothing ❒ little ❒ enough ❒ many ❒

The effectiveness of the Greek hospitals is: very bad ❒ bad ❒ good ❒ very good ❒

Please tell us in what grade do you agree with the following:

If I need care in the future I would like to be treated by the same nursing staff:

Totally disagree	Disagree	Neither disagree, Nor agree	Agree	Totally agree
1	2	3	4	5

As it concerns the nursing staff, I would recommend the same ward to a relative:

Totally disagree	Disagree	Neither disagree, Nor agree	Agree	Totally agree
1	2	3	4	5

Comments .....

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