Perceived quality in Day Surgery Units Proposal of an enquiry postoperative questionnaire



Ann. Ital. Chir., 2014 85: 172-176 pii: \$0003469X16022922

Piergaspare Palumbo, Bruno Perotti, Chiara Amatucci, Maria Pia Pangrazi, Barbara Leuzzi, Francesco Vietri, Giulio Illuminati.

Department of Surgery "Raffaele Paolucci", University of Rome "Sapienza" Rome, Italy

Perceived quality in Day Surgery Units. Proposal of an inquiry postoperative questionnaire

INTRODUCTION: Assessing patient satisfaction could be particularly useful in Day Surgery Units, as it helps maintaining and increasing medical care demand. Moreover, it provides feedback that turns out useful for improving quality in departments, and for assessing competence and skill of the whole staff.

Background and aim - The purpose of this study was to evaluate the quality perceived in a day surgery unit through a questionnaire, covering the 10 main aspects of the care pathway.

MATERIALS AND METHODS: The results of a questionnaire filled by patients undergoing Day Surgery between January 2007 and December 2012 were retrospectively reviewed. Patients undergoing surgery between 2007 and 2009 filled up the questionnaire at the time of the discharge, whereas those operated on between 2009 and 2012 filled up the same questionnaire 30 days after discharge.

RESULTS: The results were good in terms of number of returned questionnaires, underlining its comprehensibility and suitability to be filled out. The questionnaires' scores were good in both groups, although quality perceived by the group that completed it in 30 days after surgery were lightly better than the other group's.

CONCLUSIONS: The advantages of the questionnaire consisted of an overall improvement of the quality of care, whereas limitations consisted of the difficulty in setting up the questionnaire accurately, interpreting patients' answers correctly, and dispensing the questionnaire in a timely fashion, in order to evaluate the quality perceived by the patients without any bias related to delay, pain and anxiety.

KEY WORDS: Day Surgery, Nursing, Questionnaire, Quality

Introduction

Day Surgery allows an high level of medical care to patients. Simple admission procedures and a shorter hos-

pital stay minimize the impairment of patients' everyday's life. Moreover, this kind of hospitalization reduces the risk of cross infections.

On the other hand the quality and safety of care must be equal to those provided during long stay hospitalization.

A good target in managing a Day Surgery Unit is to offer high standard quality of care, whose improvement relies on an objective evaluation of the results, in order to improve patients' satisfaction. Moreover, a patient-oriented approach should involve the present and future needs of patients, aiming to fulfill their expectations.

Pervenuto in Redazione Aprile 2014. Accettato per la pubblicazione Luglio 2014

Correspondence to: Prof. Piergaspare Palumbo, Department of Surgery "Raffaele Paolucci", University of Rome "Sapienza" Viale del Policlinico 155, 00161 Rome, Italy (e-mail: piergaspare.palumbo@uniroma1.it)

Main issues are the involvement and competence of the staff members, the continuity of care, an exhaustive information, and the comfort of the care unit.

However, patients are often incapable to fully evaluate the quality of care, which is finally evaluated by the healthcare staff themselves ¹. Nevertheless, patients' point of view must not be considered unimportant, when aiming to improve efficacy, convenience and safety of treatments ². Therefore, it is necessary not only to understand patients' needs and expectations, but also to make sure that they are aware of the quality level provided ³. The purpose of this study is to evaluate the perceived quality through a questionnaire, considering the main aspects of the surgical pathway, in a simple, concise, and possibly complete manner, with the final aim of improving the performance of the whole caring team.

Identifying a suitable questionnaire, its most appropriate filling time, and patients' most accurate and truthful opinion, is the main aim of the study pathway.

Materials and Methods

From January 2007 to December, 2012, 4980 questionnaires have been submitted to patients cared at Day Surgery Unit of the "R. Paolucci" Department of Surgery. Such questionnaire was conceived to cover 10 different aspects of the care pathway:

overall conditions of the environment

- booking procedures
- admission
- presurgical procedures
- information received about the anaesthetic and surgi-
- cal procedures
- surgical intervention
- postoperative rehabilitation
- discharge
- assessment of the healthcare staff
- overall assessment

Since January 2007 to December 2009, 2406 questionnaires had been filled out immediately after surgery and before the discharge (Group A). From January 2010 to December 2012, the questionnaire was submitted 30 days after discharge to 2574 patients (Group B) in order to obtain a more accurate and truthful judgement of patient satisfaction ^{4,5}. All questionnaires dispensed to the two groups have been filled up anonymously. Questionnaires dispensed to Group A were inserted in a close box together with other questionnaires of the same year. The box containing questionnaires was opened once a year and the evaluated data were included in a database.

For Group B, questionnaires were inserted in open envelops, together with the discharge letter, and filled out at home, brought back in closed envelops and put in a box using the same criteria as Group A.

In order to evaluate only subjective criteria in patients' perceived quality, four parameters were identified: wait-

ing time before admission, waiting time before surgery, information provided about the surgical intervention, instructions received upon discharge. As shown in Table I each item could be scored from 0 (lowest quality perceived), to 5 (highest quality perceived).

Results

Results are shown in Fig. 1 and Fig. 2. In the six-year period, from January 2007, to December 2012, 5014 patients underwent surgery in our Day Surgery Unit and 4980 questionnaires had been returned for the evaluation (98.53%).

Thousand two hundred eighty-eight patients in group B (50,05%) and 49.05% of the patients in group A (1180) gave a 5 points score to the perceived quality in terms of waiting time before admission (Fig. 1, 2). 59,04% of the patients in group B (1529) and 57.35% of the patients in group A (1380) attributed a 5 points score to the quality perceived concerning the waiting time before surgery (Fig. 1, 2).

In terms of information provided before surgery, 72.62% of the patients in Group B (1869) vs. 71,58% of the patients in Group A (1722) gave to this item a 3 points score, whereas a rating of 1 was attributed by 0.99 % of the patients in Group A (24) vs 0.33% of the patients in group B (9) (Fig. 1,2).

Concerning instructions before discharge, 4,12 % of patients in Group B (106) and 3.32 % of the patients in group A (80) gave a 3 points score to the quality perceived (Fig. 1,2).

The two groups of patients were equal in terms of satisfaction related to the way nurses, doctors and surgeons approached to the patients and their diseases, and also concerning admission, surgical procedures and discharge. Such results were good in both Groups, with Group B patients showing a slightly higher satisfaction.

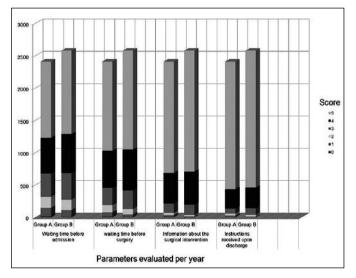


Fig. 1: Perceived quality: absolute value analysis.

TABLE I - Evaluation of quality in Day Surgery Units

Please give each item a score from1 (low) to 5 (top)					
- OVERALL CONDITIONS OF THE ENVIRONMENT					
Hygienic conditions of day hospital rooms	1	2	3	4	5
Hygienic conditions of bathrooms	1	2	3	4	5
Lighting conditions in rooms	1	2	3	4	5
Heating and/or conditioning of rooms	1	2	3	4	5 5
Lay out of day hospital rooms Respect of privacy	1 1	2 2	3 3	4 4	5 5
– BOOKING PROCEDURES					
Waiting time before admission	1	2	3	4	5
Exhaustiveness of the informative brochure handed out upon booking	1	2	3	4	5
– ADMISSION					
Assessment of admission to the Day Hospital Unit	1	2	3	4	5
- PRESURGICAL PROCEDURES					_
Information provided about the kind and purpose of the presurgical analyses	1	2	3	4	5
Care received during the analyses Waiting time before surgery	1	$\frac{2}{2}$	3 3	4 4	5 5
	1	2	5	т)
- INFORMATION RECEIVED ABOUT THE SURGICAL INTERVENTION Exhaustiveness of the information provided about the preparation for surgical intervention		2	3	4	5
Information provided about the hospitalization		2	5	4	J
procedures (time of admission, overall duration					
of the hospitalization, scheduled time for the surgical intervention)	1	2	3	4	5
Information provided about the					
surgical intervention carried out	1	2	3	4	5
– SURGICAL INTERVENTION					
Duration of the surgical intervention	1	2	3	4	5
Sensation of comfort	1	2	3	4	5
Onset of pain	1	2	3	4	5
Onset of anxiety	1	2	3	4	5
– POSTSURGICAL REHABILITATION					
Care received in the Day Hospital Unit after surgical intervention	1	2	3	4	5
Help received in recovering physiological functions (deambulation, micturition etc.)	1	2	3	4	5
– DISCHARGE					
Level of confidence upon discharge	1	2	3	4	5
Instructions received upon discharge	1	2	3	4	5
Frequency of telephone contacts	1	2	3	4	5
Number of postsurgical intervention follow-ups	1	2	3	4	5
Level of confidence during home rehabilitation	1	2	3	4	5
- STAFF	_	-	-	,	_
Kindness of the medical staff	1	2	3	4	5
Availability of the medical staff	1	2	3	4	5
Professionalism of the medical staff	1	2	3	4	5
Kindness of the nursing staff	1	2	3	4	5 5
Availability of the nursing staff	1	2	3	4	
Professionalism of the nursing staff	1	2	3	4	5
) – OVERALL EVALUATION					
Would you advice a relative/friend to be operated on in a day surgery facility?	yes		no		

Discussion

Quality is essentially a cultural issue and is linked to precise patients' request and expectation; in fact, healthcare facilities are unlikely to be committed to provide a high level of quality unless patients expressly request it ⁶. Quality in medical care often raises controversy in the choice of the parameters used to evaluate it and the costs it implies (overall, lack of quality has negative financial impact); on the other hand, when quality services are

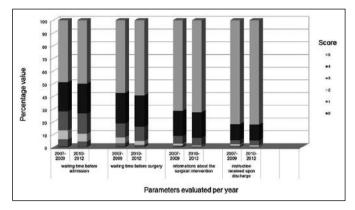


Fig. 2: Perceived quality: percentage value analysis.

objectively offered, they are unquestionably recognized by the healthcare staff. Therefore, quality perceived by patients has a different value: often their personal vision of quality health care is far from objective reality, as they may attribute importance to totally irrelevant aspects. Patients' perception of quality should not be considered a less important evaluation parameter: if a patient is satisfied, he will promote the use of this kind of service, determining the success of day hospital facilities.

In order to apply a correct pathway of improving of satisfaction, patients' feedbacks must be interpreted carefully and cautiously.

Perceived quality can be evaluated through a complaint handbook containing interview surveys or through a questionnaire ^{7,8}.

Complaint handbooks are questionably useful as they are rarely used by patients, and only in case of evident dissatisfaction. Surveys carried out through interview are generally on a limited sample of users and often the answers are influenced by the direct contact with the interviewer. The questionnaire might have some limitations as well. As it is conceived by the medical staff, who is free of deciding how to assess quality, it is exposed to the bias of omitting important aspects of the service provided. Thus, the fear of unpleasantly negative criticism, could lead to avoid aspects for which quality is known to be lacking. It is therefore necessary to set up carefully the questionnaire and involve the whole medical/nursing staff of the care facility, considering all members' suggestions. The questionnaire must deal with as many aspects as possible, in terms of logistic, clinical and psychological factors, without being too complex or hard to be understood. On the other hand, the answers provided depend on the personality of patients, who may give personal interpretation of events according to their mood, and can be influenced by irrelevant aspects or cowed by the medical staff. To avoid that, the aims of the questionnaire should be explained, and patients' answers should be assured to remain anonymous 9.

Data collection must be carried out on a regular basis but not too frequently, as it is important that the patient's identity cannot be revealed through the answers provided, especially in case of dissatisfaction, with consequent rise of conflicts, or unpleasant tension in the healthcare staff/patient relationship. The good patient satisfaction rate is closely related to correct preoperative counselling and information and education of both staff and the patients ¹⁰.

The analysis of the data obtained has multiple targets. It shows the staff interest in patients' needs. Highlights the healthcare inefficiencies, and is a valid tool to negotiate assets assignment with the administrators.

The data of this questionnaire suggest that the quality perceived by our patients is high regardless to the timing the questionnaire is proposed. However, patients that filled up the questionnaire 30 days after the discharge had perceived a better quality in terms of waiting time before the admittance, waiting time before surgery, informations provided about surgery, instructions provided upon the discharge. This difference can be explained in terms of lower sense of anxiety and pain remembered at 30 days after the discharge, compared to the more intense pain and the anxiety felt by the patients at the time of the discharge.

The high percentage of questionnaries returned (98.53%) and correctly filled out, demonstrates how simple, concise, complete and, overall, useful for the continuous quality improvement of the unit they are.

Riassunto

La soddisfazione dei pazienti assume particolare importanza nell'attività chirurgica in Day Surgery, al fine di mantenere ed incrementare la domanda di prestazioni da parte dell'utenza ed inoltre di valutare le abilità e le competenze dello staff clinico dedicato.

Sono stati valutati i risultati di un questionario somministrato dal 2007 al 2012, divisi in due gruppi, alla dimissione e a 30 giorni dall'intervento. Tali risultati hanno permesso di valutare i principali vantaggi e limiti del questionario in termini di comprensibilità, di corretto timing di somministrazione, e di utilità per lo staff clinico.

References

1. Jouffroy L: Ambulatory surgery: Safety, quality. Ann Chir, 2001; 126(7), 686-91.

2. Bellia A, Cormaci O, Virzì A, Calì R: *Il trattamento ambulatoriale della patologia varicosa: Esperienza personale.* Ann Ital Chir, 2005; 76:261-64.

3. Carditello A, Stilo F: Emorroidectomia secondo Ferguson in Day Surgery. Esperienza e risultati. Ann Ital Chir: 2006; 77:47-50.

4. Bain J, Kelly H, Snadden D, Staines H: *Day surgery in Scotland: Patient satisfaction and outcomes.* Quality in Health Care, 1999; 8 (2): 86-91.

5. Mira JJ, Tomàs O, Virtudes-Pérez M, Nebot C, Rodríguez-Marín J: *Predictors of patient satisfaction in surgery*. Surgery, 2009; 145 (5):536-41.

6. Bettelli G: Le basi della qualità in day surgery. 1999, Athena audiovisuals, Modena.

7. Wong LS, Kaukuntla HK, Lam FT, Fraser IA: A survey of patient satisfaction after day case surgery. Int J Clin Pract, 1999; 53(3):189-91.

8. Ahmad M, Zafar A, Griffin S, Ahmad S, Orakzai N, Fayyaz F: An aufit of patients' satisfaction after adult day-case surgery at Ayub Teaching Hospital. Abbottabad J Ayub Med Coll Abbottabad; 2005; 17(1): 22-5.

9. Done M, LeeA: The use of a video to convey preanesthetic information to patients undergoing ambulatory surgery. Anest analg, 1998; 87(3): 531-36.

10. Gelmini R, Franzoni C, Saviano M: *Day surgery laparoscopic cholecystectomy: Initial experience in 43 consecutive patients.* Ann Ital Chir, 2013; 84; 631-66.

11. Lemos P, Pinto A, Morais G, Pereira J, Loureiro R, Teixeira S, Nunes CS: *Patient satisfaction following day surgery*, J Clin Anesth, 2009; 21(3):200-05.

12. Idvall E, Berg K, Unosson M, Brudin L, Nilsson U: Assessment of recovery after day surgery using a modified version of quality of recovery-40. Acta Anaesthesiol Scand, 2009; 53:673-77.

13. Celli G, Campanelli G, Corbellini L, De Stefano B, Fortino A, Francucci M: *Proposta per l'organizzazione, lo sviluppo e la regolamentazione delle attività chirurgiche a ciclo diurno (Proposal for organization, development and regolamentation of day surgery)*. Min Sanità, 2001; 19-20.

14. Mitchell M: Constructing information booklets for day-case patients. Ambul Surg, 2001; 9(1):37-45.

15. Johnson RC, Pye JK, Scriven MW, Billings PJ, Wood C, Crumplin MK: *Patient's perception of surgical services in district general hospital.* Br J Surg 1999; 86(12): 1549-555.

16. Fraczyk L, Godfrey H. Perceived levels of satisfaction with the preoperative assessment service experienced by patients undergoing general anaesthesia in a day surgery setting. Journal of Clinical Nursing, 2010; 19 (19-20): 2849-859.