

Friendliness of OR Staff Is Top Determinant of Patient Satisfaction With Outpatient Surgery

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ABSTRACT

Two hundred patients (151 women) undergoing outpatient surgery at a university hospital were asked to complete a questionnaire at the time of discharge. Listing 12 factors related to preoperative, intraoperative, and postoperative care, the questionnaire asked each respondent to rank the five most important factors from 1 to 5. The most important factor, ranked among the top five by

67% of the patients, was friendliness of the operating room staff. The other four (and, parenthetically, the percentage of patients ranking the factor among the top five) were as follows: surgeons' postoperative visit (63%); management of postoperative pain (62%); starting IV smoothly (53%); and avoidance of delays (45%).

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Outcome studies have become increasingly important in managed health care, and patient satisfaction may be an important measure of outcome.¹ This study assessed patient satisfaction with outpatient surgery. Numerous studies²⁻⁷ have shown that patients are generally satisfied with day surgery, but few have indicated which factors determine patient satisfaction. Our study identified 12 factors that potentially affect patient satisfaction and asked each patient to rank the five factors that were most important in determining their satisfaction with outpatient surgery.

MATERIALS AND METHODS

We designed a questionnaire (Table 1) listing 12 factors of possible importance to patient satisfaction with outpatient surgery. The factors were related to preoperative, intraoperative, and postoperative care. Patients were given the survey when they were discharged by the anesthesiologist and were asked (1) to indicate whether each factor affected their satisfaction with outpatient surgery and (2) to rank the five most important factors from 1 to 5. Patients were instructed to choose and rank the factors that they considered important in determining satisfaction regardless of their experience that day. A standardized explanation of the survey was used, and all surveys were administered and supervised by the same investigator (EMT). Because the Human Subjects Committee of Brigham & Women's Hospital considered this study a component of continuing quality improvement, their approval was not required.

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RESULTS

The questionnaire was given to 204 English-speaking patients during April 1994. Four patients refused to participate because of time constraints, resulting in 200 completed surveys. The participants were 151 women (75.5%) and 49 men (24.5%), the women having an average age of 43.1 years (range, 16-91) and the men having an average age of 48.5 years (range, 21-81). The higher proportion of women is a reflection of the day surgery population at Brigham & Women's Hospital. By specialty, 59% of the surgeries were gynecologic, 18% ophthalmologic (41% male, 59% female), 15% orthopedic (54% male, 46% female), and 8% other (29% male, 71% female). All surveys were completed prior to discharge.

Most patients considered all factors important in determining their satisfaction with outpatient surgery. The five factors ranked most important, in descending order, were friendliness of the operating room staff, the surgeon's postoperative visit, management of postoperative pain, starting the IV smoothly, and avoidance of delays (Table 2). The percentages of patients ranking specific factors first, second, and third are shown in the Figure.

DISCUSSION

Our questionnaire (Table 1) includes 12 factors listed in chronological sequence from preoperative to postoperative. The questionnaire was pretested for comprehensibility by five lay individuals. The standardized instructions stressed that patients should evaluate each factor independent of their actual experience.

Ware and colleagues,^{8,9} after reviewing over 2000 items from published surveys and consulting with health care providers and patients, identified eight dimensions constituting major areas of patient satisfaction and dissatisfaction. We addressed each of these dimensions except "finances." For the "art of care" dimension, we

Table 1. Patient Survey Form

Please indicate which factors determine your satisfaction with day surgery.			
	YES	NO	RANK*
1. Efficiency of intake process	YES	NO	—
2. Preoperative teaching by the ASU (ambulatory surgery unit) nurses	YES	NO	—
3. Avoidance of delays	YES	NO	—
4. Starting your IV (intravenous) smoothly	YES	NO	—
5. Friendliness of OR staff	YES	NO	—
6. Your family member being informed of your progress in the ASU	YES	NO	—
7. Speediness of recovery from anesthesia	YES	NO	—
8. Management of your postoperative pain in the PACU (post anesthesia care unit)	YES	NO	—
9. Treatment of your postoperative nausea and vomiting	YES	NO	—
10. Postoperative teaching by the ASU nurses	YES	NO	—
11. Your surgeon's discussion of the operative findings during your stay in the PACU	YES	NO	—
12. Comfort of the waiting room	YES	NO	—

* Rank the five most important factors from 1 to 5.

asked about friendliness of the OR staff; for the “technical quality of care” dimension, we asked about starting the IV smoothly; for the “accessibility/convenience” dimension, we inquired about avoidance of delays; for the “physical environment” dimension, we asked about comfort of the waiting room; for the “availability” dimension, we asked about the surgeon’s discussion of operative findings; and for their “efficacy/outcome of care” dimension, we asked about management of postoperative pain as well as treatment of postoperative nausea and vomiting.

Because our survey was designed for surgical outpatients, we added three other factors of interest: efficiency of the intake process, preoperative teaching by nurses in the outpatient surgery unit, and postoperative teaching by nurses in the surgery unit. These three additional factors focused on the importance of nurses in the intake process and in patient education¹⁰ in outpatient surgery.

Friendliness of the OR staff was important to 97% of all patients and was ranked among the top five factors by 67% of patients. The importance of the affective behavior of physicians and nurses is well documented in the social science literature.

A study by Ben-Sira¹¹ found that the emotional support of physicians was a crucial element in patients’ evaluation of their treatment. Ghosh and Sallam,⁴ who assessed patient satisfaction, found that the comments of day surgery patients most often concerned the friendliness, efficiency, and skill of nursing and medical staff. Because of the limited time a patient spends in outpatient surgery, a friendly OR staff can more quickly and effectively establish rapport with patients.^{12,13} Patients may use the friendliness of the OR staff as an indicator of concern for their well-being.

The factor ranked second in determining patient satisfaction was the surgeon’s discussion of operative find-

Table 2. Survey Results

Factor	Percentage of Patients Considering Factor Important	Percentage of Patients Ranking Factor in Top 5	Rank Order of Top 5
Preoperative			
1. Efficiency of intake process	91	26	
2. Preoperative teaching by the ASU nurses	93	28	
3. Avoidance of delays	86	45	5
4. Starting your IV smoothly	95	53	4
Intraoperative			
5. Friendliness of OR Staff	97	67	1
6. Family member informed of progress	91	33	
Postoperative			
7. Speediness of recovery from anesthesia	86	42	
8. Management of postoperative pain in PACU	96	62	3
9. Treatment of postoperative nausea and vomiting	90	31	
10. Postoperative teaching by ASU nurses	93	30	
11. Surgeon's postoperative visit while in PACU	96	63	2
12. Comfort of the waiting room	87	22	

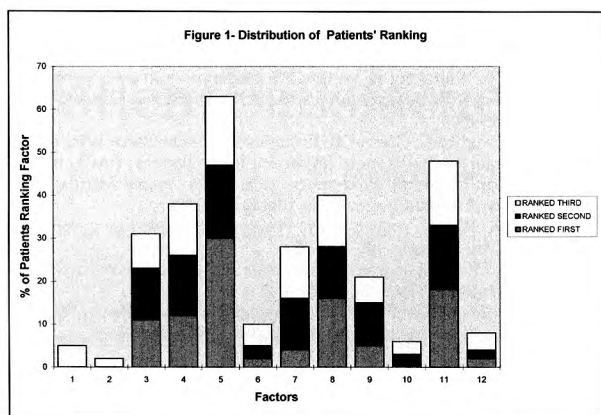


Figure. Percentage of patients ranking each factor first, second, or third. The 12 factors are listed in Table 1.

ings. This factor reflects the availability of the surgeon. A study by Pineault and coworkers¹⁴ found that only 33% of day surgery patients received a visit from their surgeon during their stay in the outpatient surgical unit. Hawkshaw² reported that some patients were told the outcome of their surgery while they were too sleepy to understand what was said.

The factor ranked third in determining patient satisfaction was management of postoperative pain. Other studies^{2,4,5} support the finding that effective management of postoperative pain is strongly related to satisfaction with outpatient surgery. Opioids, especially fentanyl, have long been the mainstay of postoperative pain control, but their side effects make them less than ideal for surgical outpatients. Twersky and coworkers¹⁵ have demonstrated that the use of adjuvant analgesics, such as ketorolac, may provide longer lasting pain control than fentanyl.

It may be that patients consider placement of the intravenous catheter (the factor ranked fourth) an indicator of the technical proficiency of the anesthesiologist. Patients may also be concerned about pain associated with placement of the IV catheter. Ahrens and colleagues,¹⁶ who studied pain experienced during IV catheter insertion, demonstrated that first attempts at insertion were viewed as less painful than second attempts.

Patients rated the avoidance of delays fifth in importance in determining satisfaction with outpatient surgery. Although a relatively low percentage (86%) of our patients considered this factor important, a relatively high percentage (45%) considered it one of the top five most important factors (Table 2). Ghosh and Sallam⁴ reported that patients waiting more than 2 hours for surgery were extremely dissatisfied. Delays may stem from problems with administration (scheduling), operative speed, and patient education.

The relative importance of postoperative pain and postoperative nausea and vomiting is of interest. In our study, 62% of patients ranked management of postoperative pain among the five factors most important to satis-

faction with outpatient surgery; 31% ranked treatment of nausea and vomiting among the top five factors.

Other studies have used patient proxies to assess the relative importance of these two side effects. Lee and colleagues¹⁷ asked nurses providing postoperative care to surgical outpatients what they perceived to be the most undesirable effects of surgery. The nurses identified retching, vomiting, and nausea as the top three unwanted side effects, and pain as the fourth. The nurses, anesthesiologists, support staff, and computer personnel studied by Orkin¹⁸ also rated the avoidance of emetic symptoms as more important than the avoidance of pain. Orkin found that the patient proxies were willing to accept tradeoffs, such as additional pain for less nausea. The relative importance of side effects depended on the specific individuals questioned. Thus, future studies of patient satisfaction should ask such questions of patients, not proxies.

This study has identified a group of factors that patients deem important to their satisfaction with outpatient surgery. Although this study confirms the importance of factors such as pain and nausea, suggested in previous studies, it suggests that other factors, such as the friendliness of the OR staff, may be of greater importance to the patient.

The design of this study assumes that the dimensions of outpatient surgical care are similar to the dimensions that Ware and colleagues^{8,9} derived from their study of outpatient primary care. Future studies are needed to test and confirm whether the dimensions apply in both settings. This study also assumes that each dimension can be represented by a single factor. Additional studies are needed to assess theoretically and empirically whether such items can represent their intended dimensions.

All studies of this nature are affected by halo and acquiescence bias.¹⁹ Aharony and Strasser²⁰ have noted the importance of establishing the reliability and validity of measures of patient satisfaction. They have also stressed the need for qualitative and quantitative strategies to discover what patients value in their care. Research on patient satisfaction with other aspects of health care is more fully developed. This study offers preliminary data on factors that patients may value in the outpatient surgical setting.

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