Perception and use of the results of patient satisfaction surveys by care providers in a French teaching hospital

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Abstract

Objectives. The aim of this study was to assess clinical staff’s opinions on the results of in-patient satisfaction surveys and their use within the quality improvement process.

Setting. The institution is a 2200-bed teaching hospital of tertiary health care employing 8000 professionals. Patient satisfaction surveys are carried out each year using a validated questionnaire mailed to a random sample of patients. The specific results of each department are sent to the medical and paramedical managers.

Methods. We conducted a questionnaire survey on 500 care providers randomly selected in every medical and surgical department.

Results. A total of 261 questionnaires were returned and analysed. Overall, 94% of responders had a favourable opinion of the patient satisfaction surveys. They considered that the patient was able to judge hospital service quality, especially in its relational, organizational, and environmental dimensions. The specific results for the department were less well known than the overall hospital results (60 versus 76%). These results were formally discussed in the department according to 40% of responders; 40% declared that these data resulted in improvement actions and considered that they led to modifications in their behaviour with patients.

Conclusions. Despite a declared interest in satisfaction surveys, the results remain underused by hospital staff and insufficiently discussed within teams.

Keywords: continuous quality improvement, patient satisfaction survey, quality in health care

In-patient satisfaction has been routinely assessed since 1998 in our hospital using a French language–validated questionnaire [11,17]. The overall hospital results are sent to all the medical and non-medical staff members. The specific results for clinical ward or department are sent to the medical and paramedical managers concerned to provide the information that clinicians need in their routine practice.

The aim of this study was to assess clinical department staff’s opinion of the results of in-patient satisfaction surveys and their use within the quality improvement process in this original context of specific ward feedback.

Population and method

Study design and population

This study was based on a questionnaire sent to a random sample of 500 professionals among the clinical departments. A reminder was sent to non-respondents 2 weeks later.

Patients’ perception of health care has gained increasing attention over the past 20 years [1]. It is currently admitted that patients’ opinion should supplement the usual indicators of quality in health care [2,3]. Patient expression is an important source of information in screening for problems and developing an effective plan of action for quality improvement in health care organizations [4]. Assessing satisfaction has been mandatory for French hospitals since 1996 [5], which has resulted in an increasing number of projects devoted to the concept of satisfaction [6], determinant of patient satisfaction [7,8], and the development and validation of generic in-patient satisfaction questionnaires [9–11].

Patient satisfaction surveys are used by hospital managers to improve the hospital environment, patient amenities, and facilities in a consumerism context [12,13]. In contrast, little has been done to determine whether patient satisfaction assessment can lead to changes in patient care at the ward or department level. The efficacy of patient-based measured feedback to improve care provider skills and practices remains controversial [14–16].
Setting

Our institution is a 2200-bed university hospital, employing 8000 professionals and comprising 56 departments: 18 medical departments, 18 surgical departments, 16 medical technology departments (imagery, biology, and functional exploration), and 4 intensive care and anaesthesiology departments.

Patient satisfaction surveys have been carried out every year since 1998 on a random sample of 1500 in-patients within 2 weeks of discharge using a French language questionnaire. The development and the validation of this questionnaire have been described in detail elsewhere [11, 17]. The participation rate is >70%. Patient satisfaction scores are estimated for the entire hospital and for each clinical department. Results include the distribution of answers to each item, an overall score, and five scores per predefined dimension of care: medical information, relation with nurses, relation with physicians, living arrangements, health care management, and responses to three open-ended questions.

Questionnaire survey development

The questionnaire was developed according to a methodology using both qualitative and quantitative approaches. We conducted face-to-face semi-structured interviews with the staff members of six departments (four medical and two surgical) to generate items. Interviews were conducted using an interview guided by a physician and researchers in sociology. They were conducted until no new ideas emerged in the content analysis performed in real time, comprising 48 care providers. Interviews were recorded and entirely re-transcribed. Content analysis was performed by three members of the steering committee who were skilled in textual analysis, complemented by a computerized textual analysis (Alceste® software; IMAGE, Toulouse, France) [18, 19]. It aimed at identifying recurrent themes that were then used to generate individual questions within the questionnaire. Health care provider interviews were also used to determine the wording in question stems and the range of response options. Thirty items were derived from these interviews (item generation). The initial questionnaire contained 26 close-ended questions and 4 open-ended questions. Of these, 21 items (17 close-ended questions and 4 open-ended questions; see Appendix) were selected by a steering committee based on their face validity [20]. Construct validity was analysed by factor analysis showing two factors. Internal consistency was satisfactory for the two scales (Cronbach’s alpha coefficient >0.70) [21].

These items were answered using a five-point Likert scale: definitely true, mostly true, not sure, mostly false, and definitely false. The questions covered professional opinions and the use of patient satisfaction surveys. Concurrently, this pilot study ensured content validity and guaranteed that the questionnaire was a true reflection of the care providers’ experience.

Data analysis

The variables were described by proportions. McNemar test was used for paired data. The proportions related to the use of satisfaction results (action taken to solve problems) were compared using the chi-squared test or Fisher exact test where appropriate. In multivariable analysis, we used a logistic regression model to estimate the odds ratio (OR) of factors associated with the use of satisfaction results. Factors were selected from univariable analysis with the cutoff at P < 0.20. A two-tailed P-value of <0.05 was considered to indicate statistical significance. Statistical analyses were carried out using SPSS version 10.1.

Results

A total of 261 questionnaires (52%) were returned and analysed. Sociodemographic and professional characteristics were not different for responders (n = 241) and non-responders (n = 239): age, sex, job, and medicine or surgery ward (all P-values >0.05). Of the responders, 73% were female, 41% were <40 years, 83% were care providers (physicians, nurses, and head nurses), 73% had worked for >10 years in the hospital, and 37% declared participating in the quality improvement process (Table 1).

Care providers’ opinions on the satisfaction survey

Most responders (94%) perceived patient satisfaction surveys positively and judged them ‘useful’, ‘essential’, ‘necessary’, or ‘important’. They considered that patients were able to judge hospital service quality, especially in its relational, organizational, and environmental dimensions. However, responders, especially physicians, were more sceptical of patients’ ability to judge the quality of technical care or the competence of physicians.

Responders also considered that satisfaction surveys can have an impact on the organization of care (74%) and on their practice (72%) (Table 2).

Knowledge of satisfaction survey results

The specific results for the ward were less well known than the overall hospital results (60 versus 76% of respondents, Table 1).
Declared use of patient satisfaction surveys in wards [n (%)]

- Impact on organizational and managerial spheres: 68 (91.9) for physicians, 135 (94.4) for paramedical personnel, 42 (95.5) for Administrative and posters, and 10 (20%)
- Action on medical care: 53 (71.6) for physicians, 109 (76.2) for paramedical personnel, 32 (72.7) for Administrative and posters, and 10 (20%)

Discussion

This study showed that care providers had a favourable opinion of the patient satisfaction surveys and expressed a real interest in the results of these surveys. They found patients’ feedback useful for identifying problems that they needed to resolve in their routine practice. However, they were not convinced that patients could judge their skills or the technical quality of care. Despite a declared interest, the study showed that patient-based surveys were not systematically taken into account within routine practice by care providers. Results were insufficiently disseminated by ward managers and insufficiently discussed within the teams to develop an improvement programme. Only a few department teams have planned limited actions to improve the quality of care.

Although there has been increasing emphasis on the use of patient satisfaction surveys to assess elements of health care quality, studies on the impact of satisfaction surveys on professional practice and quality of care have received less attention. The results of these surveys are often contradictory.

In the field of family practice, a review of 13 studies published between 1987 and 1997 showed that most general practitioners had positive attitudes to the feasibility, acceptability, and utility of using patient satisfaction measures in routine practice [22]. A survey conducted in England investigated the use of a patient satisfaction survey in general practice. Most general practitioners (61%) declared that patients’ opinion stimulated changes in their appointment systems [23].

Table 2 Care providers’ opinions on satisfaction surveys and declared use of patient satisfaction surveys in wards

<table>
<thead>
<tr>
<th>Care providers’ opinions on satisfaction surveys [n (%)]</th>
<th>Physician (n = 74)</th>
<th>Paramedical (n = 143)</th>
<th>Others (n = 44)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable opinion on patient satisfaction surveys</td>
<td>68 (91.9)</td>
<td>135 (94.4)</td>
<td>42 (95.5)</td>
<td>0.68</td>
</tr>
<tr>
<td>Impact on organizational and managerial spheres</td>
<td>53 (71.6)</td>
<td>109 (76.2)</td>
<td>32 (72.7)</td>
<td>0.74</td>
</tr>
<tr>
<td>Action on medical care</td>
<td>47 (63.5)</td>
<td>108 (75.5)</td>
<td>33 (75.0)</td>
<td>0.22</td>
</tr>
<tr>
<td>Declared use of patient satisfaction surveys in wards [n (%)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion of patient satisfaction surveys during staff meetings</td>
<td>34 (45.9)</td>
<td>61 (42.6)</td>
<td>11 (25.0)</td>
<td>0.04</td>
</tr>
<tr>
<td>Actions taken to solve problems</td>
<td>34 (45.9)</td>
<td>55 (38.5)</td>
<td>16 (36.4)</td>
<td>0.48</td>
</tr>
<tr>
<td>Modification of professional behaviour</td>
<td>33 (44.6)</td>
<td>58 (40.5)</td>
<td>16 (36.4)</td>
<td>0.67</td>
</tr>
</tbody>
</table>

P < 0.0001. Physicians more often knew specific results (84%) than paramedical personnel (55%) and administrative staff members (36%) (P < 0.001). Specific results were better known by medical and paramedical managers who received the report of satisfaction surveys directly. In most departments, managers participated in little communication on specific results. The other ward members were only kept informed during staff meetings (20%), by departmental notes and posters (20%), and by informal conversation (10%).

Responders attached a higher value to open-ended comments than to satisfaction scores (60 versus 40%, P < 0.0001) and to specific results for their department than the overall hospital results (87 versus 13%, P = 0.001). Most of them judged quantitative (satisfaction scores) and qualitative information (comments) as essential and complementary. They mainly remembered negative comments such as the patients’ perception of a lack of information, a noisy atmosphere, cleanliness, and problems with the living arrangements. Complaints about interpersonal skills and knowing what patients thought of them were considered as helpful, and such feedback prompted them to consider areas where they could improve their communication with and behaviour towards patients. Problems involving the physical environment (cleanliness of the room, quality of the food, and so on) were well known by care providers who were frustrated because they could not plan actions because of a lack of resources in the hospital or an inadequate quality policy at the institution level.

Use of patient satisfaction surveys

According to 40% of the responders, satisfaction results were formally discussed in the department; these data resulted in implementing improvement actions and led to modifications in their behaviour with patients.

The data presented in Table 2 compare the responses related to the use of patient satisfaction surveys according to physicians, nurses and administrative, housekeeping, or food service employees. Physicians were the most involved in discussions during staff meetings (P < 0.05).

In multivariable analysis, male gender, seniority >10 years, and participating in meeting discussions were significantly associated with an increased use of the patient satisfaction survey (Table 3).

The main improvement projects were related to reception skills, the development of an information sheet for patients, and an arrival procedure, the organization of hospital discharge. For example, one department drew up a complementary questionnaire survey to clarify problems brought up by the satisfaction survey. Another one (medicine) wrote a protocol for patients’ arrival in the service. Another (intensive care) organized reception of families and friends: they modified visiting hours and trained all personnel in reception skills.
recently, Greco *et al.* compared the impact of a different type of feedback on general practitioners: regular, irregular, and absence of feedback (control group). Compared with the control group, general practitioners in the intervention groups improved the quality of the patient–doctor relationship and considered that feedback from patients can help identify areas requiring improvement [24].

However, these results were not confirmed by a Dutch study comparing two randomly selected groups of practitioners: an intervention group that received and discussed the patient feedback report and a control group [25]. This study showed that patients’ perception of quality of care did not improve after feedback. A more recent randomized study conducted by the same authors showed that professionals in the intervention group had less favourable views of the relevance of patients’ feedback for their practice after receiving such feedback [26].

Results are also contradictory for hospitals. A programme in Massachusetts measured and disseminated results of satisfaction surveys in 50 hospitals, which resulted in a broad range of successful improvement activities [27]. Contrary to these results, Draper *et al.* in Victoria, Australia, conducted surveys of in-patient satisfaction over a period of 5 years and showed that the impact was modest and not very significant [28]. Results were similar in a Norwegian teaching hospital [29]. A significant improvement was found for hospital records, initial discharge letters, and final discharge reports, but no significant change was seen in doctors’ behaviour.

The declarative design of this study and the low response rate must be considered in the interpretation of these results. There is probably a gap between what responders declared and what they actually did. Moreover, the response rate was only 52%, which may constitute an important non-response bias. However, respondents and non-respondents were comparable for age, sex, job, and medical or surgical specialty. The comparability of these factors limits the non-response bias even if it cannot be excluded that other factors may have influenced the non-response.

However, the findings of this study are important because, to our knowledge, such specific ward feedback is rarely undertaken in the hospital setting. Satisfaction surveys are mainly used by hospital managers who act for the most part on the physical environment. The other dimensions of satisfaction, especially interpersonal skills and organization of care, are underused by care providers. Specific ward feedback could lead to developing improvement actions. Nevertheless, it appeared that satisfaction measures did not fully play their theoretical role of passing information feedback from consumers to providers, as suggested by the results of this study: the specific results for the ward were less well known than the

<table>
<thead>
<tr>
<th>Variables</th>
<th>n (%)</th>
<th>Odds ratios (OR) [95% confidence interval (CI)]</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Unadjusted</strong></td>
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<tr>
<td><strong>Sociodemographic characteristics</strong></td>
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<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>46 (24.3)</td>
<td>1.0</td>
</tr>
<tr>
<td>Male</td>
<td>25 (35.2)</td>
<td>1.7 (0.9–3.1)</td>
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<tr>
<td>Age (years)</td>
<td></td>
<td></td>
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<tr>
<td>≥40</td>
<td>43 (29.1)</td>
<td>1.0</td>
</tr>
<tr>
<td>&lt;40</td>
<td>24 (23.1)</td>
<td>0.7 (0.4–1.3)</td>
</tr>
<tr>
<td><strong>Professional characteristics</strong></td>
<td></td>
<td></td>
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<tr>
<td>Job</td>
<td></td>
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<tr>
<td>Housekeeping staff, secretary</td>
<td>8 (18.6)</td>
<td>1.0</td>
</tr>
<tr>
<td>Physician and nurse</td>
<td>63 (29.0)</td>
<td>1.8 (0.8–4.1)</td>
</tr>
<tr>
<td>Seniority</td>
<td></td>
<td></td>
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<tr>
<td>≤10 years in hospitals</td>
<td>11 (16.2)</td>
<td>1.00</td>
</tr>
<tr>
<td>&gt;10 years in hospital</td>
<td>54 (29.8)</td>
<td>2.2 (1.1–4.5)</td>
</tr>
<tr>
<td><strong>Wards</strong></td>
<td></td>
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<tr>
<td>Medicine</td>
<td>40 (29.0)</td>
<td>1.0</td>
</tr>
<tr>
<td>Surgery</td>
<td>31 (25.4)</td>
<td>0.8 (0.5–1.5)</td>
</tr>
<tr>
<td><strong>Ward organization</strong></td>
<td></td>
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<tr>
<td>Involvement in a quality improvement process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>45 (27.6)</td>
<td>1.0</td>
</tr>
<tr>
<td>Yes</td>
<td>26 (26.8)</td>
<td>1.0 (0.6–1.8)</td>
</tr>
<tr>
<td><strong>Discussion of patient satisfaction surveys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>17 (11.3)</td>
<td>1.00</td>
</tr>
<tr>
<td>Yes</td>
<td>54 (49.5)</td>
<td>7.7 (4.1–14.5)</td>
</tr>
</tbody>
</table>
overall hospital results, although care providers were more interested in the specific results [30]. This study resulted in identifying factors that may contribute to the effectiveness of this feedback.

There are many possible explanations for the insufficient use of patient satisfaction survey by care providers that need to be taken into account to optimize this type of feedback. Firstly, this study highlighted that a lack of quality management culture in the hospital setting was a barrier preventing department managers from considering the patient satisfaction surveys as relevant data for management. Secondly, a high level of patient satisfaction ratings is frequent, which may lessen the involvement of professionals because consumers already seem satisfied. Thirdly, this study suggests that a participative department organization (discussion of results within the department) was significantly related to better dissemination and the use of satisfaction surveys. This result is coherent with the continuous improvement quality theory and with studies that have shown that quality improvement is more often associated with a participative organization than bureaucratic and hierarchical culture [31].

In conclusion, satisfaction surveys are generally considered useful by care providers in hospitals. Even if they still do not use this information systematically to improve care delivery and services, this type of feedback triggers a real interest that can lead to a change in their culture and in their perception of patients. The first effects of this feedback, which need to be confirmed by other evaluations in the coming years, seem to announce profound modifications in the hospital setting: a greater consideration of consumer satisfaction, integration of consumer satisfaction into the continuous quality improvement programme, and a change in the relationships across the various types of care providers—e.g. with the development of multidisciplinary group discussions.

References


Appendix

**List of 21 items of the providers’ questionnaire**

Q1. I have been informed of the overall hospital results
Q2. I have been informed of the specific results of my ward
Q3–Q7. I have been informed of the specific results
  - During staff meetings
  - During continuous quality improvement meetings
  - On posters
  - On departmental notes
  - During informal conversation with colleagues
Q8. Some facts related to my ward interested me in the specific results
Q9. If yes, which one? (open-ended question)
Q10. In my ward, satisfaction results were formally discussed
Q11. I was more interested in the specific results of my ward than the overall hospital results
Q12. I was more interested by open-ended comments than satisfaction scores
Q13. In my ward, we have developed actions to solve problems identified by patient satisfaction surveys
Q14. If yes, which one? (open-ended question)
Q15. In my ward, the results of patient satisfaction surveys led to modifications in the behaviour of professionals with patients
Q16. I think that patient satisfaction surveys are useful
Q17. I think that patient satisfaction surveys are able to improve the organization of care in my ward
Q18. I think that patient satisfaction surveys are able to improve medical care
Q19. I think that patients are able to judge quality of care
Q20. According to you, which kind of services are patients able to judge? (open-ended question)
Q21. Give one pleasant and one unpleasant judgement on the patient satisfaction survey (open-ended question)