Patient Satisfaction Survey in a Teaching Hospital in Saudi Arabia: Preliminary Results

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Background: Patient satisfaction is a useful indicator of the quality of health care, but there is no one universally acceptable tool for measuring it. In Saudi Arabia, such studies are few.

Setting: In-patients in a teaching hospital.

Methodology: Opinions of hospital in-patients were sampled by means of a self-administered questionnaire over a period of 12 consecutive months. Eight areas were evaluated: professional services from medical, nursing and admission staff, and four amenities, i.e. room and linen, meals, and provision for telephone and television.

Results: A total of 1,319 patients were surveyed, forming 7.9% of the 17,536 admissions. Patients were satisfied with professional services from medical staff. However, they were dissatisfied with silence in wards during day, taste, temperature and variety of meals, as well as provisions for telephone and television. Remedial actions had been taken.

Conclusions: We concluded that the results indicated areas of patients' dissatisfaction in our hospital, and that such surveys are unique to the hospital involved. We recommend the method used here: it is easy to use, cost-effective, and beneficial to patients.

Key Words: Quality improvement; Patient satisfaction; Inpatients. Saudi Arabia.

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INTRODUCTION

Quality Assurance in health care is an evaluative activity and it is undergoing rapid modifications. Its very name is changing such that options include "Continuous Quality Improvement" and "Quality Management". There is a shift from undue emphasis on the structure and process of care to the outcome. Of this, patient satisfaction is, arguably, one of the most useful indicators. However, there are controversies, as discussed by various authors.

The definition of patient satisfaction is one issue. Another is the fact that there is no universally accepted tool for measuring it. The broad options of tools include interviews, questionnaires and "complaints corner or box". Since no one tool combines ease of use and cost-effectiveness with validity, reliability as well as general applicability, the search continues. Indeed, Ware has observed: "...there are greater demands for tools that are simple and easy to use in monitoring patient satisfaction."

In the Kingdom of Saudi Arabia (KSA), the delivery of health care is undergoing great improvements, but, what the recipients of these facilities (i.e. patients), think of them remains to be well researched.

The scarcity of information on this subject in KSA prompted us to do this study. We hope that the results will help other health planners and administrators to rectify aspects of patients' dissatisfaction which will emerge.

We set out to design a questionnaire which would demonstrate the following attributes: simplicity, be self-administered and easy to use by patients, available in Arabia and English, and flexibility such that it can be readily modified to suit any hospital in the Arab world. In this paper, we report preliminary results after one year.

METHODS

A prospective survey was undertaken in the King Fahd Hospital of the University, Al-Khobar, Eastern Saudi Arabia by the hospital-wide Quality Assurance Directorate (QAD) authorized by the hospital administration. Two weeks before the survey began, all clinical departments were informed to make them aware that such a study was under way.

A self-administered questionnaire was designed in Arabic and English. The options were simple and brief. Of the 28 options, 11 were single words. Eight aspects of hospital services were evaluated: viz, three professional services (those provided by medical, nursing and admission staff), four amenities – rooms and linen, meals, and the provision for telephone and television. We also evaluated medical students' courtesy and gentleness towards patients.

Two weeks before the survey began, Nursing managers were briefed about the background, purpose and mode of conduct of the survey. The agreed period of the study was one year. Sampling was systematic. It was achieved by involving all patients discharged in the first 5 working days of each consecutive Gregorian month. At the beginning of the week, questionnaires were handed out to patients who were likely to be discharged so that they would have an idea of items they were going to evaluate. Completed questionnaires were returned to nursing stations on the day of discharge. If a questionnaire was misplaced, another one was given.

All patients on discharge were eligible. Included also were short stay patients such as Obstetrics/Gynaecology and those for chemotherapy, as well as ICU and CCU patients, and those discharging themselves against medical advice (if willing). However, relatives of deceased patients were excluded.

Provision was made for patients who might require reading assistance from other patients or "watchers" defined as relatives or domestic helpers. If the patient was a child, the responder was a parent or a "watcher".

To enhance anonymity, tracking of responders was discouraged. Thus patient's name and medical
record number were omitted from the questionnaire. The survey began on 1st May 1993 and was closed on April 5, 1994.

Patients graded their satisfaction on a 4-point scale: poor=1; fair=2; good=3; and excellent=4 (Appendix). We considered ratings of poor and fair together as "dissatisfied". The results were analysed by SPSS PC+ statistical package.

We compared the numbers of dissatisfied patients between genders as well as between nationals and non-nationals. We used chi-square to test the significance, if any, between the differences observed.

RESULTS

A total of 1,319 questionnaires were handed out and all were collected. These represented 7.9% of the 17,536 admissions for same period. Of the responders, 786 (60%) were nationals, and 590 (45%) were males. Patients' mean age was 30+/−16 years (range <1-70). A total of 812 responded to whether they answered the question with assistance. Of these 812, 156 (19%) required assistance; 108 (including pediatric cases) did so from watchers, and 48 (5.9%) from other patients.

The monthly distribution of responders in relation to total admissions is shown in Figure 1.

Tables 1 and 2 summarize the distribution of responses. For each variable, percentages were calculated from the total responses to that particular variable.

### TABLE 1
Distribution of Patients' Rating of 3 Professional Services and Medical Students

| Variable                        | Dissatisfied | Good | Excellent |
|---------------------------------|--------------|------|-----------|
| Admixture Staff                 |              |      |           |
| Courtesey                       | 155 (13%)    | 400 (33) | 661 (54) |
| Speed                           | 173 (14%)    | 384 (31) | 690 (55) |
| Medical Staff                   |              |      |           |
| Concern                        | 85 (7%)      | 225 (20) | 960 (73) |
| Condition*                     | 114 (9%)     | 300 (24) | 844 (67) |
| On Procedure*                  | 118 (10%)    | 325 (28) | 790 (62) |
| Operation*                     | 98 (10%)     | 241 (24) | 678 (60) |
| On Discharge*                  | 106 (9%)     | 283 (24) | 808 (67) |
| Nursing Staff                   |              |      |           |
| Concern                        | 145 (11%)    | 283 (22) | 871 (67) |
| Cheerfulness                   | 179 (14%)    | 313 (25) | 779 (61) |
| Postoperative                  | 172 (13%)    | 304 (24) | 812 (63) |
| Orientation**                  | 161 (13%)    | 339 (28) | 719 (59) |
| On Discharge*                  | 121 (10%)    | 291 (24) | 821 (66) |
| Medical Students               |              |      |           |
| Courtesey                       | 131 (12%)    | 371 (33) | 624 (55) |
| Gentleness                      | 116 (10%)    | 373 (33) | 649 (57) |

* Calculation given to patients about their clinical condition, diagnostic (DX) procedure, proposed operation, and on being discharged.

** Orientation regarding ward facilities given on admission.

### TABLE 2
Distribution of Patients' Rating of Amenities

| Variable                        | Dissatisfied | Good | Excellent |
|---------------------------------|--------------|------|-----------|
| Wards                           |              |      |           |
| Cleanliness                     | 147 (11%)    | 375 (29) | 764 (60) |
| Temperature                     | 202 (16%)    | 433 (34) | 656 (50) |
| Bed Comfort                     | 106 (13%)    | 367 (29) | 736 (58) |
| Silence by day                  | 253 (20%)    | 407 (32) | 616 (48) |
| Silence by night                | 173 (13%)    | 291 (27) | 763 (60) |
| Meals                           |              |      |           |
| Appearance                      | 243 (19%)    | 474 (37) | 566 (44) |
| Taste                           | 329 (26%)    | 650 (35) | 498 (39) |
| Temperature                     | 329 (26%)    | 644 (34) | 505 (40) |
| Variety                         | 290 (23%)    | 437 (34) | 542 (43) |
| Cleanliness                     | 150 (12%)    | 417 (33) | 703 (55) |
| Timeliness                      | 188 (15%)    | 413 (32) | 677 (53) |
| Supplies and Facilities         |              |      |           |
| Linen                           | 155 (12%)    | 330 (26) | 782 (62) |
| Telephone                       | 289 (23%)    | 369 (29) | 606 (48) |
| Television                      | 281 (24%)    | 306 (26) | 574 (50) |
DISCUSSION

In surveying the satisfaction of inpatients with hospital's services, sampling becomes a practical issue. We opted for systematical sampling, and the 7.9% of the total annual admissions was considered an adequate sample size. The distribution of patients' nationality, age and sex was representative for a general hospital.

From patients' viewpoint, a self-administered questionnaire must be simple, clear, unambiguous and available in their mother-tongue. Ours was bilingual, being available in Arabic and English. At the same time, from administrators' viewpoint, the questionnaire must be sufficiently detailed in order to pinpoint the exact aspect(s) of service(s) with which patients might be dissatisfied. We believe that the questionnaire used in this study combined these attributes.

We went to great lengths to protect patients' confidentiality and avoid influencing their response. Thus, responses were anonymous, and the completed questionnaires were collected from patients only at the point of being discharged from hospital. Therefore, the results of this survey are considered fair, unbiased and representative of patients' true perception of the hospital areas studied.

We compared the responses of nationals vs non-nationals, and males vs females but found no statistically significant differences between them. Further discussion therefore refers to the group as a whole.

Our patients had graded their satisfaction on a 4-point scale, viz poor, fair, good and excellent. But, in presenting the data, we grouped poor and fair as "dissatisfied". This is because, for utility purposes, one of administrators' main aims is to answer the question: "What proportion of our patients is dissatisfied with the services they are receiving from us?" It is assumed that if an administrator takes the trouble to find this out, then he intends to remedy deficiencies which may emerge.2-11

Therefore, a more fundamental question remains: "What proportion of dissatisfied patients will be considered as threshold, i.e. sufficient to trigger remedial action?" On this issue, Vuori observed that in patient satisfaction studies, the share of satisfied patients is often over 90%.3 He added that a scholar does not find a phenomenon with so little variation worth studying. Similarly, "An administrator does not believe that such results show a problem worth solving."11

Thus, in this study, if 10% is taken as the threshold for action, then, strictly speaking, the patients surveyed were fully satisfied with only medical staff. This was so for all five variables, viz "instructions given to patients on discharge". At the lowest end of the grading, patients were least satisfied with amenities, as well as the provision for telephone and television.

On the other hand, if 20% is considered an absolute threshold for action, then, in this study, patients were dissatisfied with silence in wards during the day, taste, temperature and variety of meals, as well as telephone and television services.

To what extent were the results discriminatory? Did patients carefully consider each option before responding? Or, did they respond in a blanket fashion indiscriminately? There was evidence that results were discriminatory. Examples are as follows. Wards were found least satisfactory in terms of room temperature and silence during the day. At the same time, room cleanliness, bed comfort and silence at night were satisfactory. Similarly, concerning meals, it was their taste, temperature, variety and appearance that were least satisfactory; but their cleanliness and timeliness of service were satisfactory.

Solving identified problems is the next issue. Noise level in the hospital has been markedly reduced by prohibiting the use of public address pager system. The temperature of meals has improved by making microwave ovens widely available on all wards, and by encouraging their use. At the same time, provision for telephone and television are receiving attention.
Finally, we submit that, for practical purposes, it matters little what patient satisfaction studies actually measure. On the one hand, it can be merely patients' own perception and expectations. On the other hand, it can be the best service which money can buy. We have this belief because, "It simply makes sense to find out how patients perceive the services they get." 

Results from patient satisfaction surveys such as this one are unique to the hospital studied. There is no need to compare one hospital with another. This is because each hospital has its own catchment area, and therefore its own set of customers whom it seeks to satisfy. However, the only need is to repeat the evaluation exercise to see the impact, if any, of any corrective action. In our hospital, as in others, this re-evaluation remains to be done, and is being planned.

We recommend this questionnaire because it is cost-effective and easy to use. The volume of information obtained is adequate and the analysis is straightforward. The technique ensures that patients are not under any form of pressure so that the results express patients' unconditioned perception. Therefore the results can be put to good use to the benefit of patients.

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# Quality Assurance Directorate - KFHU In-Patient Questionnaire

Please check Poor Fair Good Excellent

| 1. Admission (e.g. ER or OPD) | Poor | Fair | Good | Excellent |
|-------------------------------|------|------|------|-----------|
| 1. Courtesy of admitting staff |      |      |      |           |
| 2. Speed of admission to ward  |      |      |      |           |

| 2. Room | Poor | Fair | Good | Excellent |
|---------|------|------|------|-----------|
| 1. Cleanliness |      |      |      |           |
| 2. Temperature (Air condition) |      |      |      |           |
| 3. Comfort of bed |      |      |      |           |
| 4. Silence during day |      |      |      |           |
| 5. Silence during night |      |      |      |           |

| 3. Nurses' Care | Poor | Fair | Good | Excellent |
|-----------------|------|------|------|-----------|
| 1. Concern for you |      |      |      |           |
| 2. Cheerfulness |      |      |      |           |
| 3. Promptness in answering your calls |      |      |      |           |
| 4. Orientation given to ward setup |      |      |      |           |
| 5. Discharge instructions given |      |      |      |           |

| 4. Doctors' Care | Poor | Fair | Good | Excellent |
|-----------------|------|------|------|-----------|
| 1. Concern for you |      |      |      |           |
| Explanation given: |      |      |      |           |
| 2. On your condition |      |      |      |           |
| 3. Before a diagnostic procedure |      |      |      |           |
| 4. Before an operation (if any) |      |      |      |           |
| 5. On discharge |      |      |      |           |

| 5. Handling by Medical Students | Poor | Fair | Good | Excellent |
|---------------------------------|------|------|------|-----------|
| 1. Courtesy |      |      |      |           |
| 2. Gentleness |      |      |      |           |

| 6. Meals | Poor | Fair | Good | Excellent |
|----------|------|------|------|-----------|
| 1. Appearance |      |      |      |           |
| 2. Taste |      |      |      |           |
| 3. Temperature |      |      |      |           |
| 4. Variety |      |      |      |           |
| 5. Cleanliness |      |      |      |           |
| 6. Timeliness of serving |      |      |      |           |

| 7. Facilities/Supplies | Poor | Fair | Good | Excellent |
|-----------------------|------|------|------|-----------|
| 1. Telephone |      |      |      |           |
| 2. Television |      |      |      |           |
| 3. Availability of clean linen |      |      |      |           |

| 8. Overall impression of this hospital | Poor | Fair | Good | Excellent |
|----------------------------------------|------|------|------|-----------|

| 9. I completed this questionnaire | Poor | Fair | Good | Excellent |
|----------------------------------|------|------|------|-----------|
| Without assistance |      |      |      |           |
| Assisted by watcher |      |      |      |           |
| Assisted by co-patient |      |      |      |           |

| Saudi | Non-Saudi | Age | Sex | M | F |
|-------|-----------|-----|-----|---|---|

Ward | Diagnosis |
Date admitted | Date discharged |

Comments and suggestions (if any):
| ضع علامة (✓) في المكان المناسب |
|-------------------------------|
| ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز | ممتاز |
| جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد | جيد |
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Journal of Family and Community Medicine Vol. 2 No. 2 – December 1995