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Patient satisfaction with the behavioral competencies of their treating doctors: a hospital based study

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ABSTRACT

Introductions: Patient satisfaction surveys are essential in identifying gaps in providing health care to patients and developing an effective plan for its quality improvement. This study aimed to assess the level of patient's satisfaction with doctors' behavioral competencies in communication skills, interpersonal manner, confidentiality maintenance and general satisfaction.

Methods: A cross-sectional study was conducted in admitted patients of Department of Surgery, Orthopaedics, Internal Medicine and Obstetrics Gynaecology between August 4, 2015 and August 28, 2015. Samples were selected by stratified random sampling technique. They were interviewed using a validated tool in 7-point Likert scale and collected data were analysed using SPSS.

Results: Out of 101 respondents, percentage of patients who had very high, high, medium, low overall satisfaction (communication skills, interpersonal manner, confidentiality maintenance and general satisfaction) were 27.7% (28), 24.8% (25), 20.8% (21) and 26.7% (27) respectively. Pearson Chi-square test and Mann-Whitney U test showed level of satisfaction did not differ with age, gender and educational level of respondents. There was positive Spearman's rank correlation of general satisfaction with communication skill, confidentiality maintained and interpersonal manners. Communication skill had the highest correlation coefficient (57.8%).

Conclusions: The overall satisfaction (very high and high satisfaction) of the patient with the behavioral competencies of doctors at Patan Hospital is 52.5%. Communication skill had the highest degree of influence on the level of patient satisfaction. The level of satisfaction was not affected by age, gender and educational level of patients.

Keywords: behavioral competencies of doctors, communication skill, patient satisfaction, quality of health care

INTRODUCTIONS

Patient satisfaction is the extent to which the patients feel that their needs and expectations are being met by the service provided.¹ It influences clinical outcome, compliance to the treatment, doctor-patient relationship, patient retention and medical malpractice claims.

Patient satisfaction is commonly used as an indicator for measuring the quality in health care. A doctor should possess the behavioral competencies of good communication skill, interpersonal manners, ability to maintain confidentiality together with the technical competencies to diagnose, perform clinical procedures, prescribe medicine etc. This study aims to summarize the association between the behavioral competencies of doctors and patient satisfaction with the doctor-patient interactions

METHODS

This was a cross-sectional study conducted from 4 to 28 August 2015 in patients admitted to four wards (Surgery, Orthopaedics, Internal Medicine and Gynaecology-Obstetrics) of Patan Hospital, Patan Academy of Health Sciences, a tertiary care university teaching hospital in Lalitpur, Kathmandu, Nepal. The representative sample was calculated using statistical formula with 95% confidence interval and 10% margin of error. The sample size of 96 inpatients was further adjusted for a 5% non-response rate. Thus, the total sample size was 101. By using stratified random sampling technique, we divided the wards into four strata depending upon their weightage of patients. The bed numbers of all the admitted patients of each ward were written on separate pieces of paper, folded and put in a container. Authors drew the papers randomly to select the patients for interview. Two to three patients were interviewed in each ward per day. The process was repeated till the desired sample size was achieved. If the number drawn were that of the previously drawn patients, then another draw was taken.

Patients of age 15 years and above were interviewed in Nepali language by the authors of this study after the first day of admission. The interviews were conducted after seeking informed verbal consent from the patients. Patients in critical condition, with mental health problems, emergency admissions, and unwilling to participate in the study were excluded. The patients were assured that their care will not be affected and the information will be kept confidential without revealing their identity. The questionnaires were assigned fictitious codes for identification to keep the information anonymous.

Questions were pooled from two validated tools: Patient Satisfaction Questionnaire (PSQ3) by Research and Development Health Corporation (RAND), USA and Patient Questionnaire by General Medical Council, Scotland.^{2,3} The final tool in English was translated to Nepali language for the patient's compliance by an expert. For the translation validation, it was again back translated by another expert and finally reviewed by bilingual reviewers to ensure that the cultural applicability of concepts does not deviate from the subject matter of the original tool. The Nepali version of the questionnaire was pre-tested with 20 inpatients of Department of ENT. The final version agreed upon was used for data collection.

The questionnaire contained three demographic variables: age, gender and educational level. There were seventeen questions for assessing confidentiality, communication skill, interpersonal manner, general satisfaction on technical competencies and the overall satisfaction on 7 point Likert scale, 1 being "strongly disagree", 2 "disagree", 3 "somewhat disagree", 4 "neither agree nor disagree", 5 "somewhat agree", 6 "agree" and 7 "strongly agree". Negatively framed questions were reverse coded. The score ranged from 17 to 119 and was transformed into percentage. The higher score indicated higher level of satisfaction.

The SPSS (Version 15.0) was used for data analysis. We performed the normality test

using the Kolmogorov-Smirnov tests because the sample size was more than 30 which demonstrated significant p-values (<0.05) for all the variables. Patient satisfaction scores were expressed as medians. Non-parametric tests, Chi-square and Mann-Whitney U test were used for categorical demographic variables of age, education, gender to assess the differences across demographics of patients and patient satisfaction. The research was conducted after the approval from the institutional review committee IRC-PAHS.

RESULTS

Out of 101 respondents, 44.6% (45) were male and 55.4% (56) were female. There were 31 patients from the Gynaecology-Obstetrics, 28 from Internal Medicine and 21 each from Orthopaedics and Surgery. Of the total respondents 9 (20%), 13 (28.9%), 12 (26.7%) and 11 (24.4%) belonged to the age-group 15-20, 21-40, 40-60 and 60 years and above respectively. Based on the level of education, bachelor's degree and above were 27 (27%), secondary level 18, lower secondary level 13, higher secondary level 9 and primary level education 8 and illiterate 26.

The median score for overall satisfaction was 90 (range 49 to 108). Overall, 52.5% had very high to high satisfaction and 47.5% medium to low satisfaction, (Table 1). Pearson Chi-square test showed that the overall satisfaction was independent of age ($p = 0.49$) and education ($p = 0.10$) of the participants. Mann-Whitney U test showed that overall satisfaction was independent of gender ($p = 0.248$) of participants.

The median score for general satisfaction was 15 (range 4 to 21). Pearson Chi-square test showed that the general satisfaction of the participants was independent of age ($p = 0.59$) and educational level ($p = 0.53$). Mann-Whitney U test showed that the general satisfaction was independent of gender ($p = 0.51$) of the research participants, (Table 2).

The median score for communication skills was 32 (range 16 to 42). Pearson Chi-square test showed that the satisfaction of the participants in regards to communication skills of their treating doctors was independent of age ($p = 0.89$) and educational level ($p = 0.48$) of participants. Mann-Whitney U test showed that satisfaction was independent of gender ($p = 0.43$) of the research participants, (Table 3).

Table 1. Level of overall* patient satisfaction with their treating doctors

Score	Level of Satisfaction	Percentage
0 - 78	Low Satisfaction	26.7% (28)
79 - 89	Medium Satisfaction	20.8%(21)
90 - 95	High Satisfaction	24.8%(25)
≥96	Very High Satisfaction	27.7%(28)

Note: **overall*** = communication skills, interpersonal manner, confidentiality maintenance and general satisfaction

Table 2. Level of general satisfaction of patients with their treating doctors

Score	Level of Satisfaction	Percentage
0 – 13	Low Satisfaction	23.8%(24)
14 – 15	Medium Satisfaction	27.7%(28)
16 – 17	High Satisfaction	14.9%(15)
≥18	Very High Satisfaction	33.7%(34)

Table 3. Level of patient satisfaction in communication skills of their treating doctors

Score	Level of Satisfaction	Percentage
0 – 26	Low Satisfaction	22.8%(23)
27 – 31	Medium Satisfaction	21.8%(22)
32 – 34	High Satisfaction	19.8%(20)
≥35	Very High Satisfaction	35.6%(36)

Table 4. Level of patient satisfaction with their confidentiality maintenance by the treating doctors

Score	Level of Satisfaction	Percentage
0 - 21	Low Satisfaction	20.8% (21)
22 - 25	Medium Satisfaction	25.7% (26)
26 - 28	High Satisfaction	26.7 % (27)
≥29	Very High Satisfaction	26.7% (27)

Table 5. Level of patient satisfaction with interpersonal manner of their treating doctors

Score	Level of Satisfaction	Percentage
0 – 12	Low satisfaction	22.8% (23)
13 – 14	Medium satisfaction	20.8% (21)
15 – 16	High satisfaction	20.8 % (21)
≥17	Very high satisfaction	35.6% (36)

The median score for maintenance of confidentiality was 26 (range 12 to 33). Pearson Chi-square test showed that the satisfaction of the participants in terms to confidentiality by their treating doctors was independent of age ($p = 0.87$) and educational level ($p = 0.65$) of the participants. Mann-Whitney U test showed that the satisfaction was independent of gender ($p = 0.14$) of the research participants, (Table 4).

The median score for interpersonal manner was 26 with a minimum of 12 and maximum of 33. Pearson Chi-square test showed that the satisfaction of the participants in terms of interpersonal manner of their treating doctors was independent of age ($p = 0.6$) and educational level ($p = 0.24$) of the participants. Mann-Whitney U test showed that the satisfaction was independent of gender ($p = 0.49$) of the research participants, (Table 5).

There was positive correlation of general satisfaction with communication skill of the doctor, confidentiality maintenance and

interpersonal manners. Communication skill had the highest correlation coefficient (Spearman Correlation Coefficient = 57.8%).

DISCUSSIONS

Out of 101 patients, those who had very high (27.7%) and high level (24.8%) of satisfaction are pooled across all the categories, it shows that 52.5% were overall satisfied while remaining 47.5 % had medium to low level of satisfaction, (Table 1). There are limited published studies locally on the level of patient satisfaction on behavioral competencies of treating doctors and its variation across socio-demographics of patients. In Nepal, a study conducted by Rizyal⁴ from Nepal Medical College Teaching Hospital (NMCTH) showed that 76.8% of the patients were satisfied with the overall eye care services. Similarly, Dahal⁵ reported an overall patient satisfaction of 73% in a survey conducted in the Western Zonal Hospital, Pokhara, Nepal. A cross sectional study conducted in Pakistan by Ahmed S et al.⁶

showed that overall satisfaction level was 100%, with 66.7% noted as very satisfying. All these studies showed a relatively higher level of overall satisfaction than that of ours. Inconsistency with the level of satisfaction could be due to the variation in the ways services are delivered, differences in the study population, socio cultural differences, variation in levels of literacy and variation in methodology.⁴

The results of our analyses confirm the findings of a study conducted in Sweden that men and women tend to have similar levels of satisfaction.⁷ This study also showed that age and education level is significantly related to patient satisfaction.⁷ In contrast, our study found that the level of patient's satisfaction was not affected by their age or educational level.

The result of our study indicates highest correlation between communication skills of doctors and patient satisfaction, which is consistent with findings of a study conducted by Mohammad-Hosseini et al.⁸

Good communication between patients and care providers has been described as the single most important component of good medical practice, not only because it identifies problems quickly and clearly, but it also defines expectation and help to establish trust between the clinician and the patient.¹ In contrast, bad communication, particularly, when the doctor appears indifferent, unsympathetic or short of time make most patients dissatisfied.¹

In a study conducted by NMCTH, patients were asked to indicate if the physicians were courteous, listened to their complaints and explained what they wanted to know on which 87.9% of respondents were satisfied (31.7%, 29.3% and 26.9% of the respondents selecting excellent, very good and good respectively) with 12.1 % of the respondents dissatisfied.⁴ Our study showed that only 55.4% (35.6% with very high satisfaction, 19.8% with high satisfaction) are satisfied with the communication skills of doctors. Disparity in

the results may have occurred due to use of combination of different tools. The barriers to good communication can be attributed to doctor's burden of work, low doctor to patient ratio, teaching hospital with beginner medical students, emotional and physical brutality of medical training, particularly during internship and residency, suppresses empathy, substitutes technique and procedures for talk and unrealistic patient expectations.⁹ The level of satisfaction varies with specialties.¹⁰

Strength of this study is we used questionnaire developed by well-known patient satisfaction research organizations, and were pretested locally. Many scores across behavioral competencies were statistically significant which points out the areas to be improved. This baseline data may be used as reference for future patient satisfaction surveys.

There were some limitations to the study. Generalizability may be limited, as the sample size is small, included physicians of different level, and from single center of tertiary care university teaching hospital. The department specific data for level of satisfaction could have been more indicative of specialties.

Periodical patient satisfaction surveys should be conducted to allow health care providers to learn if they are meeting the expectations of their patients, the areas to improve in order to provide satisfactory care to the patients.

CONCLUSIONS

The overall satisfaction of the patient with the behavioral competencies of their treating doctors in this study was 52.5% which has room for improvement. Satisfaction was not affected by age, gender and educational level of patients. There was positive correlation of patient satisfaction with communication skill of the doctor, confidentiality maintenance and interpersonal manners. Among them, communication skill had the highest correlation coefficient.

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