ORIGINAL ARTICLE

Patient's Perspective of Eye Service Quality in Yogyakarta's Teaching Hospital

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ABSTRACT

Introduction: The eye care service in The Dr. Sardjito Hospital has one of the highest number of patients amongst other health care services provided. Thus evaluation of the patients' satisfaction upon the service provision is needed to improve the quality of the eye care service.

Methods: A cross-sectional study was performed in the ophthalmology outpatient clinic at the teaching hospital in Daerah Istimewa Yogyakarta, Indonesia. Interviews were conducted on 77 patients using Patient Satisfaction Questionnaire Short Form (PSQ-18) in 2017.

Results: Overall, patients were mostly satisfied with the interpersonal manner of the doctors (mean: 4.12 ± 0.42) and least satisfied with the time spent with doctors (mean: 3.31 ± 0.95). There was a statistically significant difference among each subscale (p=0.000). Gender, income, occupation, and education had no significant statistical difference to the aspects of quality. However, significant differences were found in the financial aspects of marital status, education level, and co-diagnoses group with p-value of 0.009, 0.043, and 0.048 respectively.

Conclusions: Patient satisfaction could be improved by increasing the time spent at each visit with the doctor. Meanwhile, financial aspect is mostly affected by the patients' background. This study needs to be continued to get wider perspectives on the larger population sample of eye patients. Therefore, the quality of eye care services may be improved.

Keywords: health care quality, PSQ 18, eye care

he quality of health services is an important issue in the implementation of the National Health Insurance system and is also a goal in improving the quality of health care that is currently the center of attention, namely accreditation. The 2009-2014 Senses Health Survey shows that 1.5% of Indonesia's population suffers from

blindness caused by cataracts (52%), glaucoma (13.4%), refractive disorders (9.5%), retinal disorders (8.5%), corneal abnormalities (8.4%) and other eye diseases. With the high incidence of eye health problems, Dr.Sardjito Hospital as a referral hospital in DIY and Central Java provinces has a high number of patients in the eye outpatient clinic, thus ensuring the

quality of eye health services is an obligation. The system of monitoring and evaluating the quality of health services is done by various methods, one of which is the patient satisfaction survey.¹

Patient satisfaction surveys should be undertaken periodically not only to determine patient satisfaction levels for various services in the hospital but also to obtain feedback from patients who can be incorporated into hospital improvement plans.² Ghazanfar et al. found that patient satisfaction was higher in private hospitals when compared with government hospitals.³ Therefore, research that can describe the level of patient satisfaction to health service especially in government hospital is necessary. This research took the eye health service as the target field that examined the quality of service.

METHODS

Design and Subjects

This was a cross-sectional study involving patients aged 18 years old or above and the guardian if the patients aged below 18 years old. This study followed the tenets of the Declaration of Helsinsky and was approved by Ethical Review Board of the Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada. Written informed consent was obtained from all study participants.

Fulfillment of PSQ-18

Patient Satisfaction Questionnaire Short Form's (PSQ-18) were obtained by two trained undergraduate students after the patients had their blood pressure checked by nurse. The forms were filled by the interviewer due to patient's difficulty in reading the forms. Only established patients were involved in this study since the interviews were undertaken before eye examination on the same day.

Statistical Analysis

Means among the subscales of PSQ-18 and means in the same subscale which are divided by multiple parameters are compared using One-way ANOVA by SPSS®.

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Seventy seven participants ranging 11-75 years old were included in this study. Genders are equally distributed with 39 male and 38 female. The majority of patients (95%) had an insurance. There was statistically significant difference among each subscale of PSW-18 with p=0.000(Table 1). Each subscale was analyzed based on multiple parameters, such as marital status, income, occupation, education level, accompanying systemic diagnoses, and gender. Statistically significant differences were only found in financial aspect subscale based on marital status, education level, and acoompanying systemic diagnoses with p value of 0.009, 0.043, and 0.048 respectively (Table 2).

Table 1. Mean of PSQ-18's Subscale

| Interpersonal manner | $4.123376623 \pm 0.417398136$ |
|-------------------------------|-------------------------------|
| Communication | $3.967532468 \pm 0.50382629$ |
| Financial aspects | $3.954545455 \pm 0.564076075$ |
| General satisfaction | $3.850649351 \pm 0.580539163$ |
| Technical quality | $3.844155844 \pm 0.732047863$ |
| Accessibility and convenience | $3.571428571 \pm 0.821987286$ |
| Time spent with doctor | $3.311688312 \pm 0.953284522$ |
| p | 0.000* |

^{*}Statistically significant with One-Way ANOVA test

Table 2. Mean of Patient Satisfaction Score Based on Multiple Parameters

| | real of Fatien | General satisfac- tion | Technical quality | Interperson al manner | Communica tion | Financial aspects | Time spent with doctor | Accessibility and convenie-nce |
|-------------------|---|------------------------------|-------------------|--------------------------|-------------------|-------------------|------------------------------|--------------------------------|
| Marital Status | Not married (n=7) | 4.00±0.28 | 3.93±0.53 | 4.21±0.39 | 4.07±0.35 | 4.29±0.39 | 3.00±0.41 | 3.64±0.52 |
| | Married (n=59) | 3.86±0.42 | 3.86±0.28 | 4.14±0.31 | 3.97±0.33 | 3.96±0.34 | 3.39±0.57 | 3.60±0.45 |
| | Divorced (n=11) | 3.68±0.60 | 3.70±0.53 | 4.00±0.22 | 3.86±0.64 | 3.73±0.47 | 3.09±0.70 | 3.39±0.42 |
| | p | 0.300 | 0.336 | 0.288 | 0.517 | 0.009* | 0.099 | 0.334 |
| Income | <5 millions (n=71) | 3.86±0.45 | 3.83±0.36 | 4.12±0.30 | 3.96±0.39 | 3.94±0.37 | 3.30±0.58 | 3.58±0.43 |
| | 5-10 millions (n=5) | 3.80±0.45 | 4.05±0.11 | 4.20±0.45 | 4.00±0.35 | 4.10±0.55 | 3.60±0.55 | 3.45±0.72 |
| | >10 millions (n=1) | 3.50±0.00 | 4.00±0.00 | 4.00±0.00 | 4.00±0.00 | 4.50±0.00 | 2.50±0.00 | 3.25±0.00 |
| | p | 0.706 | 0.369 | 0.788 | 0.978 | 0.235 | 0.208 | 0.635 |
| Occupation | Not working (n=32) | 3.88±0.44 | 3.84±0.43 | 4.11±0.33 | 3.97±0.47 | 3.91±0.43 | 3.36±0.63 | 3.58±0.49 |
| | Civil servant (n=5) | 4.10±0.22 | 4.00±0.35 | 4.20±0.27 | 4.30±0.27 | 4.10±0.42 | 3.70±0.45 | 3.85±0.22 |
| | Private employee (n=7) | 3.71±0.49 | 3.82±0.35 | 4.14±0.38 | 3.71±0.39 | 4.14±0.38 | 3.21±0.39 | 3.25±0.63 |
| | Self employed (n=8) | 3.63±0.58 | 3.75±0.35 | 4.13±0.35 | 4.00±0.27 | 3.88±0.44 | 2.88±0.64 | 3.44±0.44 |
| | Retired (n=9) | 4.00 ± 0.25 | 3.83 ± 0.28 | 4.06 ± 0.17 | 3.94 ± 0.39 | 4.06 ± 0.30 | 3.44 ± 0.53 | 3.69 ± 0.35 |
| | Others (n=16) | 3.81 ± 0.48 | 3.86 ± 0.26 | 4.16 ± 0.30 | 3.97±0.13 | 3.91 ± 0.27 | 3.28 ± 0.55 | 3.61 ± 0.35 |
| | p | 0.362 | 0.910 | 0.963 | 0.228 | 0.537 | 0.179 | 0.224 |
| Education | Not graduated elementary school (n=2) | 4.00±0.00 | 3.75±0.35 | 4.00±0.00 | 4.00±00 | 4.00±0.00 | 3.50±0.71 | 3.88±0.18 |
| | Elementary school (n=27) | 3.85±0.41 | 3.76±0.38 | 4.06±0.29 | 3.89±0.47 | 3.78±0.40 | 3.46±0.62 | 3.48±0.46 |
| | Junior High School (n=7) | 3.86±0.38 | 3.82±0.24 | 4.21±0.27 | 3.93±0.35 | 4.00±0.00 | 3.43±0.45 | 3.54±0.65 |
| | High School(n=20) | 3.73±0.53 | 3.88±0.24 | 4.05±0.15 | 3.98±0.38 | 3.98±0.30 | 3.18±0.54 | 3.64±0.38 |
| | Diploma(n=6) | 4.08±0.20 | 4.13±0.38 | 4.17±0.26 | 4.17±0.26 | 4.17±0.26 | 3.67±0.52 | 3.88±0.21 |
| | Bachelor (n=15) | 3.90±0.51 | 3.87±0.46 | 4.30±0.45 | 4.03±0.30 | 4.13±0.48 | 3.00±0.53 | 3.50±0.48 |
| <u> </u> | <i>p</i> | 0.613 | 0.347 | 0.122 | 0.668 | 0.043* | 0.074 | 0.360 |
| Accompany . | 0 (n=41) | 3.89±0.38 | 3.81±0.39 | 4.12±0.27 | 3.98±0.33 | 3.90±0.39 | 3.33±0.60 | 3.51±0.47 |
| ing systemic | 1 (n=27) | 3.91±0.46 | 3.91±0.29 | 4.11±0.32 | 4.02±0.29 | 4.07±0.23 | 3.41±0.52 | 3.72±0.33 |
| • | 2 (n=6) | 3.50±0.45 | 3.79±0.43 | 4.25±0.52 | 3.67±0.88 | 4.00±0.63 | 2.92±0.50 | 3.33±0.70 |
| diagnoses | 3 (n=3) | 3.50±0.87 | 3.83±0.29 | 4.00±0.00 | 4.00±0.00 | 3.50±±0.50 | 3.00±1.00 | 3.50±0.25 |
| C1- | <i>p</i> | 0.093 | 0.727 | 0.675 | 0.242 | 0.048* | 0.228 | 0.140 |
| Gender | Male (39) | 3.81±0.47 | 3.81±0.34 | 4.09±0.25 | 3.90±0.35 | 3.92±0.37 | 3.29±0.58 | 3.52±0.46 |
| | Female (38) | 3.89±0.42 | 3.88±0.37 | 4.16±0.35 | 4.04±0.41 | 3.99±0.39 | 3.33±0.60 | 3.63±0.44 |
| | p | 0.394 | 0.366 | 0.330 | 0.104 | 0.468 | 0.800 | 0.307 |

^{*}Statistically significant with One-Way ANOVA test

DISCUSSION

We found that interpersonal manner subscale had the highest mean score and time spent with doctor was the lowest. Ghazanfar et al. found that interpersonal manner also had the highest score in their study using PSQ-18 in private and public hospital while financial aspects had the lowest.³ Other study in academic ophthalmic hospital found interpersonal manner subscale had the higher score whilst

convenience had the lowest⁴. Studies in cancer patients and AIDS patients found interpersonal manner as the highest scoring subscale.^{5,6} We suggest that the cultural background of the doctors and patients contribute to high score in interpersonal manner. Interpersonal manner has an important role in society especially in our region which is well known for its citizens hospitality.

Time spent with doctor was one of the physician related factor that was underlined by Thiedke.⁷ Longer time in

doctor visit, non-medical chat, and patient's opportunity to give feedback are related to higher satisfaction.^{8,9} Low score for time spent with doctor in our study could be caused by small amount of time spent in the eye health service (mostly done by ophthalmology resident) or the patient felt that the doctor was in a rush. If our eye service want to improve the satisfaction of the patient, improvement is needed to be done in time spent with doctor area. The resident should be trained to give sufficient time in managing the patient without sacrificing the waiting time of the other Non-medical chat and patient. opportunity of giving feedback could give perspective to the patient that the doctor is not in a rush.

Significant differences were found in financial aspects on marital status, level, education and co-diagnoses parameters. It showed that these parameters affected how the patients respond to the financial aspects of eye health service although the majority of the patients had health insurance. A meta analysis had showed that satisfaction was significantly associated with age, education, marital social status and while relationship found on ethnicity, sex. income, and family size.10 Sixma et al. found that patient's demographic factor contributed to 90-95% of variance in satisfaction score.¹¹ Further study is needed to be done to examine the cause of the difference in financial aspects. Since the medical costs are already covered by the insurance, the costs of transportation and accommodation of the patients to go to hospital and the fact that when the patients are receiving the eye care, they will have to take a day off the job, may become the cause of the disparity of score in the financial aspects subscale.

CONCLUSION

Our study was the first to address patient satisfaction on eye health service in our ophthalmology department. Time spent with doctor should be the priority to improve in the eye service and further study is needed to be done to look for the cause of significant difference in financial aspects subscale based on marital status, education level, and co-diagnoses.

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