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The impact of service quality provided by health-care centers and physicians on patient satisfaction

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Abstract:

BACKGROUND: Patient satisfaction is a comprehensive measurement of patients' happiness with the level of health care delivered to them both inside and outside the physician's office. It is commonly used as an indicator to assess the health-care quality and affects a wide range of components related to the provision of health services such as ease of access, medical malpractice, and clinical outcomes. The study aimed to analyze patients' satisfaction with the quality of health care they received at the outpatient department of Klinik Kesihatan Maharani Muar Healthcare Facility (KMMHF), Johor.

MATERIALS AND METHODS: This cross-sectional study was conducted between August and December 2019 period. Demographic information and information on patients' feelings about their physicians, treatment, and health facilities provided were collected from 407 consented patients in a simple random sampling survey using a researcher-made, an adapted Medical Interview Satisfaction, questionnaire which was pilot tested before administration to the patients. Data were analyzed with SPSS version 23. Descriptive statistics and correlational and group comparison analyses were utilized.

RESULTS: Of the 407 patients studied for physician–patient satisfaction, the overall mean of all the respondents responding was 4.089 ± 0.5, which was ranked the highest among the three objectives. The effectiveness of treatment came as the second highest with the overall mean of 4.088 ± 0.5. Finally, the overall health-care facilities had the lowest overall mean of 4.077 ± 0.5 among the three.

CONCLUSION: Most patients who visited KMMHF were mostly satisfied with the outcomes of physician–patient interaction in the clinic.

Keywords:

Effective treatment, health-care facilities, health-care service, patient satisfaction, physician–patient interaction, service quality

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Introduction

Delivering the highest quality of health-care services amidst limited medical resources has always been a major focus for health-care systems all around the globe. A good health-care system must be able to balance the delicate interactions between quality, cost, and resource allocation. Patient satisfaction is a reliable and relatively straightforward tool in measuring the quality of health-care services. After all, quality is a measurement of health-care services' capacity to satisfy patients' needs and expectations.[1]

Patient satisfaction is a major issue, particularly in government-provided health-care services in Malaysia. A certain level of patient satisfaction should be maintained if they are to remain competitive with the private sector. There are three main factors that influence patient satisfaction, which are as follows: (1) health-care service quality, (2) physician–patient relationship

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and interactions, and (3) patients' preconceived expectations. It is of paramount importance to control, sustain, and gradually improve these factors to maintain and enhance overall patient satisfaction.[2]

This study was conducted to determine the health-care service quality provided by Klinik Kesihatan Maharani Muar Healthcare Facility (KMMHF), Muar, Johor, from the patients' point of view and the relative importance of factors affecting the quality of health-care services such as physician–patient interaction, effectiveness of treatment, and the overall health-care facilities in KMMHF.

The perceived quality of the service provided in the KMMHF was the user's overall evaluation of what was received and what was given. Patient satisfaction was considered a major criterion of quality. However, related data have not been formally collected and published to help with the improvement of health-care service quality. Patient satisfaction with medical service was of prime significance regarding quality enhancement program for the patients' contest, total quality management, and the anticipated result of service.[3-9]

Patients' satisfaction toward the service quality of the hospital and physician was the main goal in our research. This research was conducted to help us understand the level of satisfaction of the patients in KMMHF, and by doing so, the data can be used to better understand patients' expectations and experiences when receiving the service. However, one shortcoming of this research is that the data can be only used as an estimation, as the methodology used may be inaccurate. Still, the results of this study will help us identify weak points within the current service framework and actions that can be taken to help improve the service quality.

The aim of the study is to analyze patients' satisfaction with the quality of health care they received at the outpatient department (OPD) of KMMHF, Johor.

Materials and Methods

This cross-sectional study was conducted between August and December 2019 period. The OPD at KMMHF provides services to patients with diabetes, hypertension, and other common diseases; it is situated in Muar, Johor, Malaysia. The daily load of OPD patients is 500–600. The total sample size was 407 with the participation rate was 100%. Demographic information and information on patients' feelings about their physicians, treatment, and health facilities provided were collected from 407 consented patients in our survey. For data collection, we used a pretested questionnaire. This is a researcher-made questionnaire, which was pretested on 10% of participants before administration to the actual participants. The questionnaire consists of four segments. In the first segment of the questionnaire, the demographic information was recorded. In the second segment, the responses of physician–patient interaction were recorded. In the third component, the data on the effectiveness of treatment were captured and in the last/fourth segment, the overall health facility was rated. Participants of the study were randomly selected on daily basis from a pool of patients from the OPD at KMMHF by using a convenient sampling method. A self-administered questionnaire was then given to each participant to fill out and data were collected. There were five available responses (Likert scale) for each variable of the questionnaire, "strongly disagree," "disagree," "uncertain," "agree," "strongly agree," corresponding to a score of 1–5, respectively. A mean score >3 suggests satisfaction toward the health-care services provided and a score of <3 suggests the opposite.

Under this survey, our target was to analyze 407 samples and assess patients' satisfaction with the service quality provided by KMMHF.

A content validity index (CVI) value of 3 or 4 demonstrates content validity and framework consistency as shown by Lynn.[10] Thus, we determine a CVI value of 0.8 (4/5) or above as acceptable and valid for inclusion in the study. All our study items were valid with CVI values of 0.8 (4/5) to 1.0 (5/5).

A total of 10 participants were included in the study. 10/10 participants reported a score of either 3 or 4 on a Likert scale 1–4 for each item in the questionnaire. 10/10 said that they fully understood the question and found no difficulty answering them. 10/10 participants also commented that the presentation and arrangement of the questionnaire were suitable for its intended audience.

We computed Cronbach's Alpha to test the internal consistency of our study and yielded a value of 0.887, which reflects a high degree of correlation between different items in the questionnaire.

The Medical Research Ethics Committee of Asia Metropolitan University, Selangor, Malaysia, approved the study. All participants who took part in the study did so according to their own free will. Informed consent, as well as written consent, was obtained from every participant. All the data obtained from the study are kept secure and confidential.

Data were accordingly analyzed using SPSS version 21 (IBM Chicago, USA). Descriptive statistics and correlational and group comparison analyses were utilized.

Results

Most of the respondents were Chinese (45.5%), followed by Malay (44.5%) and Indian (10%), respectively. Among our participants, 50.9% were female. A total of 83% of our participants were married, and 51.4% were employed (51.4%). Most (80.4%) of the participants were educated up to the secondary level, followed by tertiary level (15.7%) and primary level (3.9%).

As shown in Table 1, the overall mean of all respondents responding to the physician–patient interaction was 4.089 ± 0.5. It was found that mean satisfaction scores were significantly higher for the question, "The physician gave me a chance to say or ask all I wanted to" (4.120 ± 0.5), showing that patients who came to KMMHF were very satisfied with the freedom given to them to ask questions to the doctors [Figure 1]. Followed by the professionalism of the physician (4.108 ± 0.75), patients understanding toward their sickness (4.091 ± 0.25), physician expertise in explaining the medical problems to the patient (4.071 ± 0.5), and finally, patients' time with the physician (4.054 ± 0.5) had the lowest mean of satisfaction.

Next, based on the data on effectiveness of treatment summarized in Table 2, the overall mean of satisfaction was found to be 4.088 ± 0.5. It was found tha patients' regular medical checkup facility was associated with the highest (4.145 ± 0.75) overall mean satisfaction. The physician's concern regarding patients' confidentiality and privacy (4.138 ± 0.25) was the second highest, followed by the effectiveness of prescribed medicine (4.069 ± 0.5), patients' opportunity to be involved in the decision-making of their health condition (4.052 ± 0.5), and finally, advice given by the physician helps to improve patients' lifestyle (4.039 ± 0.5).

Overall health-care facilities, shown in Table 3, had an overall mean of 4.077 ± 0.5 where the highest mean satisfaction was for the skills and expertise of health-care staff in the clinic (4.172 ± 0.75), followed by the medical records provided by the health-care facilities (4.118 ± 0.25), the convenience of the location of the clinic (4.081 ± 0.5), the convenience of the registration process in the clinic (4.020 ± 0.75), and finally, the least satisfactory was the condition of medical equipment in the clinics (3.995 ± 0.25).

Table 1: Patients' feeling about the physicians

A. Physician-patient interaction	Mean
The physician gave me a chance to say or ask all I wanted to	4.120±0.05
The physician shows professionalism	4.108±0.75
I understand my illness better after seeing the physician	4.091±0.25
The physician was good at explaining the reason for my complaints	4.071±0.05
I had enough time with the physician	4.054±0.05
Overall mean	4.089±0.5

Table 2: Perceived effectiveness of the treatment

B. Effectiveness of the treatment	Mean
Regular medical checkup allows me to monitor my health status	4.145±0.75
The physician's concern for confidentiality and privacy	4.138±0.25
The medicine prescribed by the physician improves my health condition	4.069±0.5
The opportunity to be involved in the decision-making about my health condition	4.052±0.5
Advice given by the physician allows me to change for a healthier lifestyle	4.039±0.5
Overall mean	4.088±0.5

Table 3: Health facility survey

C. Overall health-care facilities	Mean
The skills and expertise of the staffs (health-care workers, nurses, and laboratory technicians, and other departments)	4.172±0.75
Clinic provides a detail medical record book for every patient	4.118±0.25
The convenience of the location of the clinic	4.081±0.5
The convenience of the registration process	4.020±0.75
The clinic is well equipped with modern and up to date medical equipment	3.995±0.25
Overall mean	4.077±0.5

Discussion

Patient satisfaction is commonly used as a quality indicator in health care. Patient satisfaction affects multiple things in multiple ways ranging from clinical outcomes, hospital reputation, to patient retention.

Despite being a proxy indicator of a real health-care scenario, the impact of patient satisfaction on the timely, efficient, and patient-centered delivery of quality health care remains. The success of physicians and hospitals inevitably relies on patients' satisfaction.

Our study evaluated patients' satisfaction with the quality of health care they received at the OPD of KMMHF, Muar, Johor.

Our study result showed that most participants reported the highest satisfaction in physician–patient interaction, with a mean of 4.089. This finding is consistent with a study conducted by Kuteyi *et al*., Nigeria,[11] in which it was reported that a high degree of patients' confidence in their physicians contributes significantly to the overall

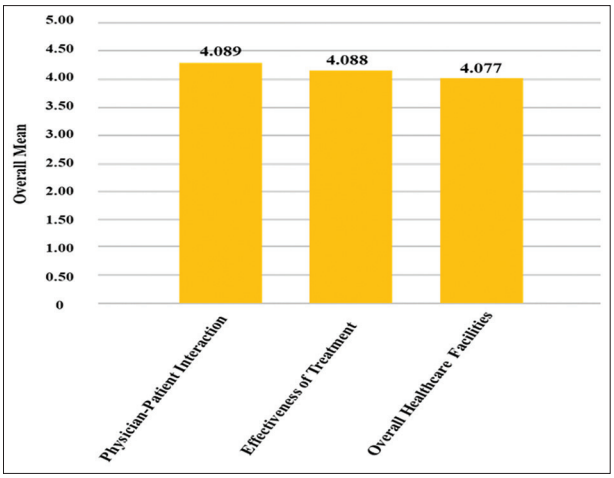

Figure 1: Mean satisfaction score by physician–patient interaction, effectiveness of treatment, and overall health-care facilities

patient satisfaction level. However, a study by Al-Abri R *et al*. (2014) showed that patients in the United States of America rated the quality of nursing care as the single most significant factor to overall patient satisfaction, as opposed to other factors such as physician care, cleanliness, and admission process.[12]

Satisfaction with the effectiveness of treatment came in a close second, with a mean value of 4.088. This showed the importance of a physician's role in administering appropriate treatments, giving proper consultation, and maintaining patients' trust. A research study by Lin *et al*. in Iran also showed similar results to ours in which they found a strong positive association between overall patient satisfaction and physician–patient confidentiality.[13] On the other hand, Ahmadi Kashkoli *et al*. reported no significant impact of physician–patient confidentiality and social support systems on the overall level of patient satisfaction.[14]

Satisfaction with the overall health-care facilities came in last, with a mean value of 4.077. This result is consistent with a study conducted by Baal Baki I *et al*. (2017), USA, in which they found a strong association between physicians' medical qualification and waiting time to the overall level of patient satisfaction.[15] A study by Zineldin *et al*. in Sweden, 2006, further supported this idea, in which they reported that patients' sense of well-being in the hospital (41.1%), followed by availability of visitor parking (33.5%), and waiting time (32.7%) being the main factors influencing the overall level of patient satisfaction.[16]

Limitations

A small sample size and shorter duration of the study are our study limitations. Hence, from this study, inferences cannot be generalized. We conducted research on OPD only; this is also another limitation.

Conclusion

Most of the patients who visited KMMHF were mostly satisfied with the physician–patient interaction they experienced in the clinic, and satisfaction level among all health facilities was ranked number three. Patients play a major role in the health-care sector; therefore, health-care centers must make sure that their service quality is effective and efficient.

Recommendation

KMMHF will have to improve on certain areas to increase the efficiency of their clinics. First, the physician should spend more time with the patient during the time of consultation. Second, physicians should also give more informative advice to the patient on how to maintain a healthier lifestyle. Finally, the clinics should always be well equipped with state-of-the-art equipment.

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Conflicts of interest

There are no conflicts of interest.

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