

ORIGINAL ARTICLE

PATIENT SATISFACTION: A COMPARISON BETWEEN GOVERNMENT AND PRIVATE CLINICS IN MUKIM LABU, SEPANG, SELANGOR

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ABSTRACT

A cross sectional study was carried out to identify and compare factors that contribute to patient satisfaction towards the medical care services provided at the outpatient clinic in government health clinics and private clinics in Mukim Labu, Sepang, Selangor. Systematic sampling for government clinic and universal sampling for private clinics were done and data was collected via face-to-face interview based on a validated Patient Satisfaction Questionnaire (PSQ). A total of 181 patients aged 15 to 75 years old were selected, comprising 90 patients from the government clinics and 91 patients from private clinics. The majority of the patients were males (62.4%), Malay (79.0%), aged between 25 to 34 years with a mean age of 34.6 years and acutely ill (80.7%). Generally, all patients were satisfied with the services provided in both government and private sectors. Patients in private clinics, however, had a significantly higher satisfaction score as compared to the respondents in government clinics. There was significant correlation between patient satisfaction score and household income in government and private clinics. Significant correlation was also found between patient satisfaction score and age in government clinic. Patients in private clinics were more satisfied towards the interpersonal manners, availability and continuity of care of the clinic compared to patients in government clinics. Whereas patients in government clinics were more satisfied towards the service charges. This study provides important information that could be used by providers of health care services to monitor and improved the quality of medical care in the respective sectors.

Key words: Patient satisfaction, government clinics, private clinics, Selangor

INTRODUCTION

Since 1957, health infrastructures and facilities in Malaysia, including at the district level have been expanding drastically in keeping with the requirement of Primary Health Care (PHC)¹. At the district level, PHC centres were set up not only by the government but also by private sectors². Often, primary health care clinics (ie primary medical care), particularly the outpatient clinics, are the first point of contact for the community in seeking medical advice and treatment³.

According to Gambrill, primary medical care may be defined as that point at which a member of the community makes a decision to consult a professional or semi-professional medical care worker regarding a medical problem, which he or she believes that person may help to solve⁴. Since development in the primary medical care grows rapidly, improved delivery of primary medical care services is increasingly seen as critical efforts to improve health care access and quality⁵. It is commonly acknowledged that patients' report of their satisfaction with the quality of medical care and services are as

important as many clinical health measures and becomes the primary means of measuring the effectiveness of health care delivery⁶. Patient satisfaction has been viewed as an outcome or result of patient experience in using or attempting to use health care⁷. Ross *et al* stated that health care providers and regulators now recognize patient satisfaction as a legitimate measure of health care quality⁸. In fact, Bolus and Pitts also stated that a number of standards-setting organizations and consumer groups have begun using patient satisfaction as a key indicator of health care quality⁶.

Patient dissatisfaction with medical care may cause a major impact in health care services. There was evidence that patients who were dissatisfied with the medical care they received were less likely to adhere to recommended courses of treatment or return for needed follow-up visits^{9,10,11}. In an article written by Thomas and Penchasky, they stated that the degree of dissatisfaction among the patients influences their behaviour¹². Therefore, dissatisfaction with medical care services may further lead to lower utilization of the medical care services by the patients.

The aim of this study was to compare patient's satisfaction on medical care services with characteristics of the patients and medical services at the outpatient clinics (in government and private clinics) in Mukim Labu, Sepang, Selangor. Findings from this study could be used for program planning as well as in monitoring and improvement in the quality of primary medical care services.

METHODOLOGY

This study was a facility-based comparative cross-sectional study. It was conducted in Mukim Labu, Sepang, Selangor in 2001 at the outpatient clinics at the government health clinics and private clinics.

Mukim Labu comprises of six villages and one new town, Bandar Baru Salak Tinggi. There was only one government health clinic and nine private clinics available in Mukim Labu. Two private clinics were chosen by simple random sampling. Both of the selected private clinics were almost similar in terms of estimated number of patients, service fees, types of service available, equipments and panel doctors to companies.

The health clinic comprises of two sub-clinics, namely the Outpatient Clinic (OPC) and Maternal & Child Health Clinic (MCH), with one medical officer is in charge of each clinic. The OPC received approximately 1616 patients per month. The first private clinic received approximately 491 patients and the second private received approximately 325 patients per month.

All Malaysian patients aged 15 years old and above who came to the clinic at least once were included in the study. However each patient was not allowed to answer more than once, irrespective of the frequency of the visits. Patients who did not understand Bahasa Malaysia or English were excluded from the study. A total of 181 respondents were selected in this study. Selection was done via systematic sampling at the government clinic and universal sampling for the private clinic. This was due to the smaller number of patients who attended the private clinics compared to the government clinics.

A standardized validated Patient Satisfaction Questionnaire (PSQ) was used in this study. It was adopted and modified from a study done by Haliza AM (1997)¹³. The questionnaire were on sociodemographic characteristics and patient satisfaction on medical care services. All selected patients were interviewed by the same interviewer after they received their medications.

The information on satisfaction included accessibility/facilities (six items), physical environment (eight items), interpersonal manners (eight items), technical quality (six items), efficacy/outcome (four items), availability (five items), service charge (two items) and continuity of care (three items). Standardized 5-point Likert scales ranging

from strongly disagree to strongly agree (1 to 5 points) were used for all the 42 items. Patient satisfaction was measured and classified into low (42-97 points), moderate (98-153 points) and high (154-210 points) levels of satisfaction based on the total score. For each aspect of medical care, the mean score was calculated. If the mean score was 3+ or 4+, the respondent was considered as satisfied and if the mean score was 2+ or 1+, the respondent was considered as dissatisfied with the medical care services¹³. Positive and negative statements were intermingled in this module to prevent acquiescence bias⁸. For each negative statement, the score for the statement will be reversed during the calculation of the scores, which means, if the respondent's score was 1 (strongly disagree), the score will be calculated as 5 (strongly agree) and vice versa. Acute illness was defined as illnesses that occur acutely less than 3 months duration¹⁴.

The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 10.05 for Windows. Chi-square and Students' t-test, analysis of variance (ANOVA) and Pearson's correlation were used in analyzing the data.

RESULTS

A total of 181 respondents were interviewed in this study. Out of 92 eligible respondents at the government clinic, two respondents (2.2%) refused to participate, giving a response rate of 97.8% (n=90). Whereas, at the private clinics, only one (1.1%) out of 92 eligible respondents refused to be interviewed, giving a response rate of 98.9% (n=91). There was 16.7% of respondents in government clinic who had never been to private clinics whereas a majority (62.6%) of respondents in private clinics had never been to government clinic.

Sociodemographic characteristics

Table 1 shows the distribution of respondents in the government and private clinics by age and gender. Overall, the majority of the respondents were males (62.4%) and aged 25 to 34 years old (28.7%).

This study also showed that majority of the respondents were Malays (72.2% in the government clinic and 85.7% in the private clinics), married (67.8% in the government clinic and 69.2% in private clinics), had education up to secondary level (54.4% in the government clinic and 64.8% in private clinics), came to the clinic by car (47.8% in the government clinic and 58.2% in private clinics), number of household between 1 to 5 (56.7% in the government clinic and 67.0% in private clinics), distance of the clinic from their house was less than 5 km (51.1% in the government clinic and 65.9% in private clinics), and time taken to the clinic within 1 to 10 minutes (64.4% in the government clinic and 81.3% in private clinics), presented with acute illness (68.9% in the government clinic and 92.3% in private clinics) and household income between RM1000 to RM2000 (45.6% in government

clinics and 45.0% in private clinics) (Table 1).

In terms of occupation, majority of the respondents who attended private clinics worked in the private sectors

whereas majority of those attending government clinics worked in both government and private sectors (Table 1).

Table 1. Number and percentage of respondents by age group, race, marital status, level of education, type of occupation, type of transportation, type of illness, household number, household income, house distance from the clinic and time taken to the clinic among the respondents.

Factors	Government n (%)	Private n (%)	p
Age group (years)			
15-24	23 (25.5%)	27 (29.7%)	p<0.01
25-34	17 (18.9%)	35 (38.5%)	
35-44	18 (20.0%)	18 (19.8%)	
>44	32 (35.6%)	11 (12.1%)	
Race			
Malays	65 (72.2%)	78 (85.7)	p<0.01
Chinese	6 (6.7)	1 (1.1)	
Indians	19 (21.1)	9 (9.9)	
Others	0 (0)	3 (3.3)	
Marital status			
Married	61 (67.8%)	63 (69.2%)	p>0.05
Single	29 (32.2%)	27 (29.7%)	
Divorced	0 (0%)	4 (4.4%)	
Level of education			
University	4 (4.4%)	8 (8.8%)	p<0.01
College	10 (11.1%)	18 (19.8%)	
Secondary	49 (54.4%)	59 (64.8%)	
Primary and no formal education	27 (30.0%)	6 (6.5%)	
Type of occupation			
With government	24 (26.7%)	13 (14.3%)	p<0.001
With private	24 (26.7%)	66 (72.5%)	
Others	42 (46.6%)	12 (13.2%)	
Type of transportation			
Walking	4 (4.4%)	7 (7.7%)	p>0.05
Motorcycle	42 (46.7%)	30 (33.0%)	
Car	43 (47.8%)	53 (58.2%)	
Bus	1 (1.1%)	1 (1.1%)	
Type of illness			
Acute	62 (68.9%)	84 (92.3%)	p<0.001
Chronic	28 (31.1%)	7 (7.7%)	
Household number			
1-5	51 (56.7%)	61 (67.0%)	p>0.05
6-10	32 (35.6%)	28 (30.8%)	
11-15	7 (7.8%)	2 (2.2%)	
Household income			
<1000.00	40 (44.4%)	18 (19.8%)	p<0.001
1000.00-2000.00	41 (45.6%)	41 (45.0%)	
> 2000.00	9 (10.0%)	32 (35.2%)	
House distance from the clinic			
<5	46 (51.1%)	60 (65.9%)	p>0.05
5-10	39 (43.3%)	19 (20.9%)	
>10	5 (5.6%)	12 (13.2%)	
Time taken to the clinic			
1-10	58 (64.4%)	74 (81.3%)	p<0.05
11-20	27 (30.0%)	13 (14.3%)	
21-30	5 (5.6%)	4 (4.4%)	

Patient satisfaction

Respondents in all three clinics were satisfied with the medical care services they received. Respondents in both private clinics had a significantly higher total satisfaction score (mean = 176.57 + 11.79) compared to the total satisfaction score of respondents attending the government clinic (mean 171.94 + 16.47). In general, the majority of respondents (92.3%) in all clinics were highly satisfied with the services provided (Table 2).

Table 2. Distribution of respondents by satisfaction level

Satisfaction level	Respondents		Total n (%)
	Government n (%)	Private n (%)	
Low	0 (0.0%)	0 (0.0%)	
Moderate	10 (5.5%)	4 (2.2%)	14 (7.7%)
High	80 (44.2%)	87 (48.1%)	167 (92.3%)
Total	90 (49.7%)	91 (50.3%)	181 (100%)

Patient satisfaction with sociodemographic factors

Pearson Correlation was used to determine the association between patient satisfaction score with age, household number, household income, distance and time taken to travel to the clinics. In the government clinics, there was significant positive linear relationship between patient satisfaction score with age ($p < 0.001$) and significant negative linear relationship with household income ($p < 0.01$). In the private clinics, there was only significant positive linear relationship between patient satisfaction score with household income ($p < 0.01$) (Table 3).

Table 4 shows the association of patient satisfaction score with gender and type of illness in both clinics. There was no significant difference between patient satisfaction score with gender and type of illness (acute and chronic) in both clinics ($p > 0.05$).

Association between patient satisfaction score and race, marital status, education level, type of occupation and

Table 3. Correlation between patient satisfaction score and patient characteristics among respondents

	Pearson Correlation (r)	
	Government	Private
Age	0.450**	0.148
Household Number	0.085	0.029
Household Income	-0.277*	0.277*
Distance	-0.058	0.117
Time taken	0.018	0.061

* Significant $p < 0.01$

** Significant at $p < 0.001$

transportation is shown in Table 5. In the government clinic, there was significant difference between patient satisfaction score with race ($p < 0.05$), marital status, level of education and type of education ($p < 0.01$). In the private clinics, there was significant difference between

Table 4. Patient satisfaction score in association with gender and type of illness among respondents.

	Clinics (t value)	
	Government	Private
Gender	-1.199	-0.717
Type of illness	-1.886	-0.665

patient satisfaction score and marital status ($p < 0.05$). There was no significant difference found between patient satisfaction score and type of transportation in the government and private clinics ($p > 0.05$).

Analysis of Patient Satisfaction Score in Relation to Medical Characteristics

Correlation between patient satisfaction scores and medical care characteristics were analyzed using Pearson Correlation and the results are shown in Table 6. In all clinics, there was significant positive linear relationship

Table 5. Association between patient satisfaction scores with patient characteristics among respondents

	ANOVA (F ratio)	
	Government	Private
Race	3.761*	0.53
Marital status	8.40**	4.86*
Level of education	3.74**	0.89
Type of occupation	3.36**	0.27
Transportation	1.04	2.03

* Significant $p < 0.05$

** Significant $p < 0.05$

between patient satisfaction score and all medical care characteristics ($p < 0.01$) except for the service charge aspect. Significant difference was found between patient satisfaction score with the service charge aspect in the government clinic but this difference was not found in private clinics ($p > 0.01$).

DISCUSSION

In general, all patients were satisfied with the medical care services provided by the government health clinic and private clinics in Mukim Labu, Sepang. It was found that patients in private clinics were more satisfied with the services provided as compared to patients in the government clinic and this finding is similar to the study done by Haliza (1997)¹³.

Table 6. Correlation between patient satisfaction score and medical care characteristics among respondents.

Medical care characteristics	Pearson Correlation (r value)	
	Government	Private
Accessibility	0.76*	0.54*
Physical environment	0.75*	0.68*
Interpersonal manners	0.79*	0.60*
Technical quality	0.79*	0.78*
Efficacy/Outcome	0.77*	0.70*
Availability	0.51*	0.59*
Service charge	0.31**	0.01
Continuity of care	0.53*	0.44*

*Significant $p < 0.001$ **Significant $p < 0.01$

In all clinics, there were positive relationships between patient satisfactions with the aspects of accessibility/facilities, physical environment, interpersonal manners, technical quality, efficacy/outcome, availability and continuity of care of the medical care services. In addition, Rubin *et al* (1993)¹⁵ and Kurata *et al* (1992)¹⁶ in their studies in the United States found that most patients in medical care centres were highly satisfied with physician technical skills and personal manners.

In this study, there was an association found between patient satisfactions with the service charge aspect in the government clinics. However this association was not significant in the private clinics. This is definitely true since patients in private clinics need to pay for the treatment and medication they receive from the clinics. This result is consistent with a meta-analysis study on satisfaction literature done by Hall and Dornan (1988)¹⁷, which stated that in general, patients were satisfied with all aspect of the medical care except for cost.

Several socio-demographic variables were found to be associated with patient satisfaction towards the medical care services in this study. Majority of the patients who attended the government and private clinics were teenagers and adults. In term of private clinics, there was no association found between age and patient satisfaction. However, there was positive relationship between age and patient satisfaction in the government clinic. This indicates that older patients tended to be more satisfied with the medical care services provided by the government clinic. This is probably because older patient are mellow and are probably better treated compared to younger patients. This finding is compatible with studies by Prabakaran (1997)¹⁸ in Sabak Bernam, Bertakis *et al* (1991)¹⁹ in Canada, and Baker and Streatfield (1995)²⁰ in South Western Healthy Authority Region, which found that there was an association between age and satisfaction towards the medical care services.

The biggest ethnic group in Mukim Labu is the Malay ethnic group. Therefore, it was not surprising that the majority of the patients in both clinics were Malays. In the government clinic, Malay patients were more satisfied towards the medical care services compared to other races. Again, Prabakaran (1997)¹⁸ found a similar result in his study. This study also shows that married patients were the majority in all clinics. Married patients were found to be more satisfied with the services provided by the government and private clinics compared with unmarried patients.

Patients in private clinics have higher level of education compared to patients in the government clinic. Another study done in Kuala Selangor, Selangor also found that patients in private clinics were more educated². However there was no association found between education levels with patient satisfaction in private clinics. Whereas in the government clinics, patients who had education up to secondary level were more satisfied with the medical care services provided.

Most of the patients who attended the private clinics worked in private sectors. This is because the private clinics they attended were their company's panel clinics. Patients who were employed by government or private sectors who attended the government clinic were more satisfied with the medical services provided compared to the unemployed patients.

Generally, patients in the private clinics had higher household income compared to patients in the government clinic. Al Junid and Ismail (1992)² also found a similar finding. This indirectly shows that patients with higher household income preferred to go to the private clinics in seeking medical advice and treatment. Perhaps, this is because they can afford to pay for the service charge or their perceptions that medical care services provided by the private clinics were better than the services provided by the government clinics. In the government clinic, patients with lower household income were more satisfied with the services provided compared to patients with higher household income. This is supported by a study done by Al Kareem *et al* (1996)²¹ in public health centres in Qatar, which found that patients with lower household income had a higher level of satisfaction compared to patients with higher household income. Conversely in this study, patients with higher household income in the private clinics were more satisfied with the medical care services provided by the clinics compared to patients with lower household income. This result is contradictory to the results of a study done by Prabakaran (1997)¹⁷ in Sabak Bernam, which noted that there was no association between household income and patient satisfaction.

Medical care providers in Malaysia should be more aware and sensitive to patient satisfaction. The health care providers should always ensure the quality of medical care services at an optimum level. Findings from this study

could be fed back for health care providers in Mukim Labu, Sepang to improve their performance, relative to the needs and expectations of their patients.

There is a need for further in-depth and comprehensive study on patient satisfaction in primary medical care centers in Malaysia which can be used to improve the medical care quality in Malaysia as a whole.

CONCLUSION

This study showed that most of the patients were satisfied with the medical care services provided by the government and private clinics. However, there is always an ample room for improvement in the health and medical care services in both government and private clinics especially related to interpersonal manners and continuity care.

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