Original Article

Healthcare Provider-Patient Communication: A Satisfaction Study in the Outpatient Clinic at Hospital Kuala Lumpur

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Abstract

***Background*: There is growing interest in research on patient satisfaction with healthcare provider (HCP) communication as a measure of healthcare quality and HCPs' communication competency. This study aimed to determine the levels of patient satisfaction with healthcare provider-patient communication (HCP-PC) and its associated factors at the outpatient clinic at Hospital Kuala Lumpur.**

***Methods:* A cross-sectional study was conducted on a convenience sample in July 2012 using self-administered questionnaires for the data collection. Both overall and domain-specific satisfaction were measured, with the three domains being exchanging information (EI), socio-emotional behaviour (SB), and communication style (CS).**

***Results:* The findings show that 92.8% of the 283 respondents were satisfied with overall HCP-PC, 89.5% with EI, 91.3% with SB, and 72.2% with CS. Satisfaction was statistically higher among Malays for CS and higher among those with low education and poor health for EI, SB and CS. EI and overall communication satisfaction were also higher among patients who reported short wait times, and patients who were in gender concordance with their HCPs showed higher SB satisfaction.**

***Conclusion:* Basic and continuous communication skills training and patient activation programs should be established to increase patient satisfaction. Health information technology use should be actively promoted to allow for structured and standardised information exchange between HCPs and patients.**

Keywords: *patient satisfaction, communication, primary care*

Introduction

Effective healthcare provider-patient communication (HCP-PC) is a vital element in patient-centred care. In the medical setting, communication not only concentrates on sharing information regarding problems, causes and possible treatments but also acknowledges the patients' emotional needs. Patients who identify and perceive that their HCPs are sincerely concerned about them will be more satisfied with their medical consultations. There is growing interest in research on satisfaction with HCP-PC as a measure of healthcare quality and as an evaluation of HCPs' communication competency. Simple changes in HCPs' communication styles, such as addressing patients' opinions, discussing problems, and encouraging patients to ask questions, may have a substantial impact on patient satisfaction with communication and with overall health services (1).

Previous studies have reported that many patients were unhappy even when a majority of HCPs claimed that they provided their patients with adequate or excellent communication. Compared with patients, HCPs also tend to overestimate their communication abilities and the levels of patients' understanding; HPCs perceive themselves as always providing similar communication from one patient to another (2). Although many studies have reported on patients' discontent with their HCPs' communication, the principles of patient-centred communication are still not commonly practiced or promoted in many health facilities (3). In Malaysia, although communication skill training (CST) among medical graduates has begun to formalise, very few organisations provide continuous medical

education (CME) programs that focus on teaching communication skills to medical graduates. In addition, limited published information and a lack of research that evaluates the effectiveness of the CST methods employed by medical schools make it difficult to determine whether medical education in Malaysia is evolving towards producing health providers who are patient-centred as well as competent in establishing and maintaining effective HCP-PC in their practice (4). This study aimed to determine the levels of patient satisfaction with HCP-PC and its associated factors among clients at the outpatient clinic at Hospital Kuala Lumpur (HKL).

Material and Methods

A cross-sectional study was conducted among patients of the outpatient clinic at HKL. The inclusion criteria were: age 18 years or older, Malaysian citizenship, understanding Bahasa Malaysia and agreeing to participate in the study. A total of 283 users of outpatient services were recruited using convenience sampling. Data were collected for 10 days consecutively in July 2012 using a self-administered questionnaire. The questionnaire consists of self-developed items as well as items adapted from other instruments with improved structure and wording to ensure better understanding among the local patients. The questionnaire was validated by a pilot study conducted among outpatients at Pusat Perubatan Primer, Universiti Kebangsaan Malaysia Medical Centre (UKMMC) in April 2012. Component-based reliability showed strong internal consistency, with Cronbach's alphas of 0.92, 0.96, and 0.72 for αEI, αSB, and αCS, respectively. Factor analysis showed that all items loaded on the corresponding components with factor loading ≥ 0.6, suggesting that all items were measuring the same direction. Principal component analysis (PCA) explained 61.98% of the total variance, with 6.66%, 47.18%, and 8.13% explained by the domains EI, SB, and CS, respectively.

HCP-PC was measured using a 30-item instrument. Both overall and domain-specific communication were measured, and the communication domains that were measured were exchanging information (EI), socio-emotional behaviour (SB), and communication style (CS). EI was measured by ten items, two items from the original Patient Enablement Instrument (PEI) (5) and eight self-developed items that aimed to determine whether sharing information helped patients to better understand and manage their illnesses, maintain their health, follow their HCP's instructions and comply with their medications as well as to return for treatment. Seven items were modified from the Patient Satisfaction Questionnaire III (PSQ-III) (6), and nine self-developed items were used together in one section to measure patients' perceptions of their HCPs' socio-emotional behaviours, such as courtesy, politeness, and friendliness, as well as providers' abilities to recognise and respond to emotions such as empathy when communicating with patients. CS was measured by four items from the Nonverbal Immediacy Scale (NIS). The items measured non-verbal communication such as eye contact, body gestures and voice tone when communicating with patients (7). All items used a five-point Likert scale where 1=strongly disagree, 2=disagree, 3=uncertain, 4=agree and 5=strongly agree. The negative items were reverse-scored (so that 1=5, etc.).

For this study, the total scores for overall and domain-specific communication were calculated. The scores were: overall communication, 30–150; EI, 10–50; SB, 16–80; and CS, 4–20. Overall and domain-specific satisfaction were thus determined. For overall communication, a total score of 30–89 indicates dissatisfaction and 90–150 indicates satisfaction. For EI, a total score of 10–29 indicates dissatisfaction and 30–50 indicates satisfaction. A total SB score of 16–47 indicates dissatisfaction and 48–80 indicates satisfaction. A total CS score of 4–14 indicates dissatisfaction and 15–20 indicates satisfaction (8–10). The data were analysed using Statistical Package for the Social Sciences (SPSS) software version 17.0 developed by International Business Machines (IBM), New York, United State of America. Independent *t* tests and the Mann-Whitney U test were used to identify associations between the variables and both overall and dimension-specific satisfaction.

Results

Table 1 describes the patients' profiles, service-related factors and patient-HCP concordance. Of 277 respondents, 60.6% were female, and 203 (73.3%) were young (18–32 years old). Regarding the ethnicity of those who had sought treatment, 191 (69%) were Malays and 86 (31%) were non-Malays. A total of 146 (52.7%) respondents had low education backgrounds (primary and secondary school), 198 (71.5%) respondents had low incomes (RM1500 and less) and most of the respondents, 266 (96%), rated their health status as good. The majority, 176 (63.5%), were walk-in patients, 222 (80.1%)

respondents reported short wait times of 30 min or less and 248 (89.5%) reported experiencing short consultations of 15 min or less. With respect to patient-HCP gender and ethnic concordance, 162 (58.5%) respondents reported consulting with HCPs of the same gender, and 141 (50.9%) respondents reported ethnic concordance with their HCPs.

Table 1: Description of patient profile, service related factor and patient-HCP concordance (n = 277)

Characteristic	n	%
Gender		
Male	109	39.5
Female	168	60.6
Age (Years)		
18-32	203	73.3
33 or older	74	26.7
Ethnicity		
Malays	191	69.0
Non Malays	86	31.0
Educational level		
Low	146	52.7
High	131	47.3
Income		
Low (RM1500 or less)	198	71.5
High (more than RM1500)	79	28.5
Health status		
Good	266	96.0
Poor	11	4.0
Types of registration		
Walk In	176	63.5
Appointment	101	36.5
Waiting time		
Short (30 minutes or less)	222	80.1
Long (more than 30 minutes)	55	19.9
Duration of consultation		
Short (15 minutes or less)	248	89.5
Long (more than 15 minutes)	29	10.5
Gender concordance		
Yes	162	58.5
No	115	41.5
Ethnic concordance		
Yes	141	50.9
No	136	49.1

The median satisfaction scores and IQRs at 25% and 75% of domain-specific and overall communication were calculated. The IQRs were: EI, 39 (36–41); SB, 63 (57–65); CS, 14 (11–16); and overall communication, 114 (105–122). Table 2 and Table 3 show the analysis of the associations between HCP-PC domain-specific and overall communication satisfaction with patient-related and service-related factors as well as patient-HCP gender and ethnic concordance; P values are also shown. For service-related factors, wait time showed a significant impact on overall communication satisfaction, but overall communication satisfaction did not significantly differ by patient-related factors or by patient-HCP gender or ethnic concordance. Patients with short wait times reported significantly higher satisfaction than did patients with longer wait times. The results also show that EI satisfaction scores differed by education level among the patient-related factors and by wait times for the service-related factors. No significant difference in patient satisfaction was found for patient-HCP gender or ethnic concordance. Patients with low education levels and short wait times showed significantly higher satisfaction than did those with higher education levels and longer wait times. There were significant differences in SB satisfaction scores by health status and patient-HCP gender concordance. For the service-related factors, no significant differences were found. Patients with poor health and HCP gender concordance had statistically higher satisfaction scores than did patients with good health and patients with HCP gender discordance. Only ethnicity and health status showed a significant difference in CS satisfaction scores, but for service-related factors and patient-HCP gender and ethnic concordance, no significant differences were found. Malay patients were found to have higher satisfaction compared with non-Malays

Discussion

Overall communication and domain-specific satisfaction scores

The functioning of health care systems mostly depends on HCPs' meeting their populations' expectations. However, seeing many patients every day in an outpatient clinic could lead to more possibilities for unmet expectations. With reference to this, the high satisfaction levels for overall communication might have

Table 2: Analysis of patient related factor and HCP-PC satisfaction

Variable	n	Domain							
		Exchanging information (EI)		Socio emotional behavior (SB)		Communication style (CS)		Overall	
		Mean (SD)	*P* value	Mean (SD)	*P* value	Mean (SD)	*P* value	Mean (SD)	*P* value
Age[a]									
Young	203	3.686 (0.616)	0.372	3.752 (0.732)	0.326	3.531 (0.543)	0.936	3.656 (0.577)	0.795
Old	74	3.757 (0.499)		3.759 (0.553)		3.508 (0.469)		3.677 (0.476)	
Gender[a]									
Male	109	3.681 (0.603)	0.598	3.703 (0.700)	0.326	3.494 (0.504)	0.426	3.627 (0.559)	0.400
Female	168	3.720 (0.577)		3.786 (0.680)		3.545 (0.537)		3.684 (0.547)	
Income[a]									
Low	198	3.772 (0.579)	0.429	3.789(0.694)	0.176	3.559 (0.519)	0.083	0.691 (0.544)	0.167
High	79	3.660 (0.608)		3.665(0.672)		3.439 (0.529)		3.589 (0.567)	
Education level[a]									
Low	146	3.776 (0.525)	0.033[c]	3.848(0.558)	0.016b	3.563 (0.444)	0.199	3.730 (0.453)	0.030[b]
High	131	3.626 (0.642)		3.648(0.799)		3.482 (0.599)		3.586 (0.637)	
Ethnicity[a]									
Malays	191	3.743 (0.577)	0.098	3.783 (0.685)	0.278	3.569 (0.519)	0.036[c]	3.700 (0.542)	0.089
Non Malays	86	3.618 (0.602)		3.687 (0.695)		3.427 (0.525)		3.578 (0.565)	
Health status[b]									
Good	266	68 (9)[+]	0.689	65 (9)[+]	0.051[c]	60 (9)[+]	0.040[c]	194 (25)[+]	0.260
Poor	11	66 (28)		70 (18)		65 (11)		205 (65)	

*Number of item (score range) = Overall= 30 (30–150), EI = 10 (10–50), SB = 16 (16–80), CS = 4 (4–20). [a]Independent *t* tests, [b]Mann Whitney Test, [c]Significant $P \leq 0.05$. ± Median (IQR).

Table 3: Analysis of service related factor and patient-HCP concordance with HCP-PC satisfaction

Variable	n	Domain							
		Exchanging information (EI)		Socio emotional behavior (SB)		Communication style (CS)		Overall[a]	
		Mean (SD)	*P* value	Mean (SD)	*P* value	Mean (SD)	*P* value	Mean (SD)	*P* value
Types of registration[a]									
Walk in	176	3.704 (0.623)	0.990	3.774 (0.695)	0.509	3.548 (0.500)	0.339	3.676 (0.556)	0.574
Appointment	101	3.705 (0.518)		3.718 (0.678)		3.485 (0.552)		3.637 (0.544)	
Duration of consultation[a]									
Short	248	3.697 (0.600)	0.538	3.751 (0.699)	0.822	3.524 (0.524)	0.926	3.658 (0.560)	0.728
Long	29	3.768 (0.459)		3.781 (0.600)		3.534 (0.535)		3.696 (0.479)	
Waiting timea									
Short	222	3.749 (0.557)	0.012c	3.773 (0.668)	0.337	3.566 (0.500)	0.009	3.697 (0.530)	0.034[c]
Long	55	3.527 (0.672)		3.674 (0.768)		3.360 (0.586)		3.521 (0.616)	
Gender concordance[a]									
Yes	162	3.728 (0.579)	0.437	3.812 (0.709)	0.053[c]	3.557 (0.547)	0.233	3.70 (0.579)	0.168
No	115	3.672 (0.598)		0.667 (0.652)		3.480 (0.488)		3.608 (0.598)	
Ethnic concordance[a]									
Yes	266	3.763 (0.579)	0.090	3.800 (0.696)	0.168	3.571 (0.536)	0.136	3.716 (0.556)	0.099
No	11	3.644 (0.590)		3.696 (0.678)		3.477 (0.508)		3.606 (0.542)	

*Number of item (score range) = Overall = 30 (30–150), EI = 10 (10–50), SB = 16 (16–80), CS = 4 (4–20). [a]Independent *t* tests, [b]Mann Whitney Test, [c]Significant $P \leq 0.05$.

been attributable to patients' familiarity with and acceptance of the circumstances in public hospitals, which kept them from expressing critical comments about the HCPs in this health facility. Another potential explanation is the patients' self-awareness about their own roles and responsibilities, such as actively seeking information by asking more questions to increase their understanding about their illnesses, which could lead to their high satisfaction levels. Furthermore, the patients' communication satisfaction levels could have been influenced by the mass media through advertisements that promote quality health services in Malaysia. This situation has altered the social and behavioural aspects and community perceptions of communication in medical settings.

Patients with different socio-economic backgrounds in this study gave high satisfaction scores on the exchanging information domain, which led to the speculation that HCPs have successfully accomplished their goal of empowering patients with information about their illnesses and about self-care management. Patients are more satisfied with exchanging information when they have been told the name and the cause of their illness by their health care providers, thus increasing their understanding of the illness. The comprehensive information delivered to all of the patients decreased their information needs, leading to fewer questions and a higher level of satisfaction with consultations (11); inquiries can be a source of dissatisfaction among patients (12).

The degree of patients' satisfaction with the EI during consultations in this study is also facilitated by socio-emotional behaviours related to patients' needs (13). This phenomenon was found to be true in this study in that the satisfaction levels for both domains were nearly equal. We agreed that this could have been because the HCPs showed more empathic responses and more concern as perceived by patients, which had an impact on patients' understanding about their illnesses and health outcomes (15). Concerned providers are more likely to tell their patients the names and causes of their illnesses to increase their understanding, thus helping them to manage their illnesses, leading to increased satisfaction levels.

Patient satisfaction with HCP communication: Do the differences in patient socio-demographics matter?

We found that more highly educated patients were less satisfied with their HCPs' communication. This finding is consistent with local studies conducted by Nora et al (14) and Johari et al (15). Although patients with higher education levels tend to be active during consultations (17), they generally rate their communication satisfaction negatively (18), and many of them were unhappy with their consultations in this study. This situation led patients to openly criticize and express their feelings, especially when they felt that the treatments they had received did not meet their expectations. It is conceivable that this is associated with more highly education patients' literacy levels and greater expectations, which contribute to their greater communication dissatisfaction compared with that among less-educated patients (17–19). Another reason could be the curtailed duration of these patients' consultations. Patients with more knowledge typically want more explanation, and they expect more time to be spent discussing their problems, but because so many patients must be served, HCPs may shorten many consultations to give time to other patients, which could have led to the dissatisfaction among these patients. Meanwhile, the significantly higher satisfaction among the less educated patients could be because their HCPs dispensed information in ways they could easily comprehend in order to increase their sense of empowerment and their self-care status.

Some studies have reported that HCPs showed negative affect with patients with poor health status, causing these patients to experience more dissatisfaction (20). However, we found otherwise. That is, the notion that patients with poor health status are less preferred by physicians (21) was not supported in this study. Patients with chronic illnesses or poor health status may have acquired information and may ask their providers more questions. In this case, the HCPs' ability to help these patients express their feelings, opinions, concerns and inquiries would contribute to this group's higher satisfaction scores (22). Patients with poor health status may experience depression, anxiety and other psychosocial problems because of their illnesses. HCPs who effectively assess these emotions in a systematic manner by initiating consultations concerning emotions and seeking cues of emotional distress will be able to substantially affect patients' quality of life, thus increasing patients' positive evaluations of their health providers (23,24). Patients had different preferences in decision-making participation that varied according to the severity of their illnesses. Patients with more severe illnesses may not want to involve themselves in decision-making

processes (25). Instead, they simply follow the health providers' advice and recommendations. In relation to this, we agreed that health providers have a clearer understanding of their patients' preferences for their levels of involvement in decision-making. This induces HCPs to practice appropriate communication styles that conform to their patients' preferences. In this case, the health providers might have used a more dominant style when conversing with patients with poor health status, thus contributing to these patients' higher satisfaction levels.

Malays have been reported to be less satisfied than other races (26,27). However, our findings showed that the satisfaction levels among Malays statistically surpassed those of the other races. Previous studies stated that patients' ethnicity determined their standards of intelligence, feelings of affiliation and attitudes towards compliance with treatment (28). Therefore, we believe that the higher satisfaction scores among Malays are attributable to their own motivations, intentions, and willingness to learn about their illnesses, thus contributing to their higher satisfaction levels (29). In this study, non-Malay respondents understood the Malay language but might not have been using it as their first language. Miscommunication is possible when patients from different ethnic groups interact with their HCPs (30) who use the national language. This language barrier could have affected the satisfaction levels among non-Malays, and it results from the contrast in how HCPs respond and react to patients of different ethnic groups when tending to their emotional or psychosocial needs. Thus, the relatively lower satisfaction levels among the non-Malay respondents could have been because of the difficulty in establishing good rapport between patients and HCPs from different ethnic groups. To a great extent, this dissatisfaction is because HCPs who are not familiar with patients' particular cultures might not be able to establish the right words to communicate with people from different ethnic backgrounds (28-31), increasing the prevalence of misunderstanding and misinterpreting non-verbal cues (32) and exchanged information.

Service-related factors and patients' HCP-PC satisfaction scores

For service-related factors, there was a significant difference in EI satisfaction scores by wait time, but for the SB, CS, and overall communication satisfaction scores, no significant differences were found. For the duration of consultations, there were no significant differences found for EI, SB, CS or overall communication satisfaction scores. A great deal of evidence has shown a negative relationship between wait times and satisfaction. Patients who waited longer than expected were less satisfied (33). Nevertheless, contrary to the findings from Thompson et al. (34), who showed that there was no significant association between patient satisfaction and wait time, we found otherwise. A previous study showed that longer wait times are associated with how HCPs take care of other tasks while attending to patients (35). This situation is notably accurate in teaching hospitals, in which HCPs are required to simultaneously tend to patients in wards and teach medical graduates. HKL is a training centre for doctors, but there is less training in the outpatient department (OPD) compared with other departments. As such, HCPs can concentrate on giving more consultations more effectively, minimising unnecessary delays in the outpatient clinic and leading to shorter wait times for patients. This circumstance eventually increased patients' satisfaction with HCP communication.

The majority of our respondents experienced short wait times of less than 30 minutes. This situation most likely occurred because the clinic opened early, coupled with the HCPs' punctuality as well as the high number of health providers available to serve patients. According to our observation, there were 11 consultation rooms in operation to cater to the high number of patients in the OPD. The large daily number of OPD patients is possibly because of HKL's status as the national tertiary hospital and its location in the centre of Kuala Lumpur. In addition, the reason for this situation might be associated with the effectiveness of the current appointment system and the organization of patient flow, which further reduced wait times and thus increased patient satisfaction levels.

The importance of patient-HCP gender and ethnic concordance

The analysis showed significant differences in SB satisfaction scores by patient-HCP gender concordance, although for EI, CS and overall communication satisfaction, no significant differences were found. For patient-HCP ethnic concordance, no significant differences were found for EI, SB, CS or overall communication satisfaction. These findings might have been attributable to patients' having their expectations successfully fulfilled through consultations with HCPs of the same rather than the opposite gender (36). There might also be a tendency for more

discussions of social and psychosocial problems through informal talks when patients consult with same-sex HCPs (37). Informal, non-medical talks have been reported to have a positive correlation with patient satisfaction because the patient-health provider relationship is established based on these elements. Spending time on informal talks also made patients feel that their health providers saw them as individuals rather than merely medical cases (38).

We also believe that patients mostly trust HCPs who are of the same gender because they perceive that same-sex HCPs tend to be more sympathetic and are more likely to understand their problems. Edward et al. (39) reported an incident in which a female patient who was examined by a male health care provider had experienced verbal offensive remarks from him, and he was also physically rough during her examination. Experiences such as this led to increased dissatisfaction among patients who experienced patient-HCP gender discordance.

Our study has some limitations. This assessment relied on patients' self-reported perceptions of their interactions with their HCPs in regard to the quality of provider communication. The scores could have been affected by characteristics that were specific to the patients such as personality, previous encounters with HCPs and background rather than actual communication. The finding of this study do not represent the communication satisfaction levels among outpatients in all health facilities in Malaysia; these results cannot be generalised because these respondents are not representative of all patients in Malaysia or of clients of private healthcare facilities given that the study was conducted in a tertiary public hospital.

Conclusion

The majority of patients in this study were satisfied with the clinic's overall communication, and high satisfaction was also reported in all three communication domains. The findings showed that patient satisfaction was statistically influenced by multiple factors: ethnicity, education level, health status, wait times, and gender concordance. However, additional studies should be conducted to clarify these findings and determine the variables that affect communication satisfaction scores, allowing for facilities to improve on these variables. Studies should also estimate satisfaction in different medical departments and among patients from different type of health facilities both public and private.

There is always the need for additional improvement, such as enhanced collaborative communication between HCPs and patients, through basic, continuous communication skill training, especially for medical graduates; better training will produce a wide range of HCPs who attentively listen to their patients and communicate clearly. Patient activation programs should be developed to teach and provide instruction on how patients should explain their problems clearly, ask relevant questions, seek clarification and ensure that they understand what has been conveyed. This strategy should fit into busy outpatient clinic schedules, and it emphasises the patient's agenda and empowerment to take action. In addition, health information technology is another promising strategy for improving HCP-patient communication because it allows for structured, standardised information exchange between HCPs and patients. For example, clinics could provide spaces for computer kiosks so that patients could enter their data while they wait for their consultations. This information would then be transmitted to the HCPs, allowing both the HCPs and patients to review the data graphically during the visit. These outcomes could lead to more efficient communication and information exchange during subsequent face-to-face visits with HCPs.

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Conflict of Interest

None.

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Authors' Contributions

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