

Attitudes and role orientations on doctor-patient fit and patient satisfaction in cancer care

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INTRODUCTION Findings in the area of patient-physician relationship are riddled with inconsistencies. Although patient-centredness has been found to have special relevance in chronic illnesses, no study in the Southeast Asian region has so far examined role orientation and its implication for patient-centred outcomes in the cancer context. This study aimed to examine role orientation in cancer patients and their physicians, doctor-patient fit and how this congruence relates to patient satisfaction.

METHODS The participants were 80 cancer patients and 12 physicians from a single academic medical centre. All participants completed the Patient-Practitioner Orientation Scale, while only the patient participants completed the self-administered Patient Satisfaction Questionnaire.

RESULTS The cancer patients and their oncologists were found to be patient-centred and thus showed a high doctor-patient fit. Our findings also support the hypothesis that patient-centredness (overall mean = 4.66 ± 0.585) and patient-physician congruence (overall mean = 4.95 ± 0.088) are significantly associated ($t(90) = -1.75$, $p = 0.084$) with patient satisfaction ($r = 0.56$, $p < 0.01$).

CONCLUSION To our knowledge, this study is the first in the Southeast Asian context to examine congruence using role orientations of cancer patients and their oncologists as well as the resultant patient satisfaction in an actual clinical setting. The finding that strong doctor-patient fit is linked to higher patient satisfaction is unexpected and differs from the results of other studies from the USA. Further studies are required in order to examine how this may be influenced by differences in socio-cultural norms and expectations.

Keywords: cancer care, doctor-patient fit, patient-centeredness, patient-physician relationship, patient satisfaction
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INTRODUCTION

Patient-centred care has special relevance in the management of chronic illness,^(1,2) especially given the increasing advocacy for patients' involvement in their own care.⁽³⁾ Patient-centred care has been shown to improve short-term patient-reported outcome measures,^(4,5) such as patient satisfaction, increased treatment adherence and improved patient self-care, leading to long-term health benefits.^(6,7) In addition, patient-centredness may be influenced by background factors such as culture,⁽⁸⁾ context and reason for consultation (e.g. cancer care vs. primary care complaint), which may affect preferences and need for patient-centredness.⁽³⁾

Attitudes refer to a set of relatively stable and consistent beliefs underlying the behaviour of either the patient or the physician during interaction in the medical context.⁽⁹⁾ As a component of patient-centred care, attitudes carry weight with regard to patient-physician relationships and delivery of care. Patients and physicians characteristically employ consistent role orientations, suggesting that their behaviour is derived from a set of attitudes they bring into the medical encounter.⁽¹⁰⁾ Role orientation in this study focuses on patient and physician attitudes, as measured by patient- or doctor-centredness. In itself, role orientation forms the basis or character of the patient-physician relationship,

which lies at the centre of doctor-patient fit and its ensuing patient satisfaction. The doctor-patient fit, which is fundamental to improved patient satisfaction,⁽¹¹⁾ refers to role orientation congruence (or non-congruence) between the patient and physician. A doctor-centred patient would prefer and get along better with a physician whose orientation is also doctor-centred as opposed to a patient-centred physician. Antithetically, a patient who prefers to have more active involvement in his own care should ideally be matched to a patient-centred physician and not one who is authoritarian and doctor-centred.

Findings in this area remain discrepant despite the significant body of literature published,^(7,12,13) perhaps due in part to the fact that a patient's (and physician's) preferred role orientation or approach may vary across different contexts and cultures, and may possibly change over time.⁽⁸⁾ Incidentally, all previous studies are largely conducted in a Western or Japanese setting.^(12,14–16) Findings from Western secondary care settings indicate that one-third of chronically ill patients, including those with cancer, did not show a preference for patient-centred approaches to care.^(3,14) Recent studies in Japan, although not without a host of contradictory evidence,^(12,17) suggest a slowly evolving paradigm shift from doctor-centred to patient-centred medicine, which is consistent with the evolving pattern of

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care in Western countries.⁽¹⁸⁻²⁰⁾ So far, no other study in the Southeast Asian region has yet examined the role orientation of patients and their physicians, as well as its implications for important patient outcomes (such as satisfaction) in the cancer context.^(21,22)

Although there is general evidence regarding the kind of care patients expect from their physicians and what would bring about greater patient satisfaction, there is a paucity of data specifically examining the patient's preferences against those of the physician, as well as data involving cancer patients entering an oncological consultation situation. Thus, this study aimed to identify the role orientation of cancer patients and their physicians in the context of an impending oncological consultation. Additionally, we sought to examine how different attitudes or role orientations relate to the doctor-patient fit in oncological patient-physician relationships and how this affects patient satisfaction. The first hypothesis stipulated that cancer patients and their oncologists would be patient-centred. The second stipulated that patients would be more satisfied with physicians whose approach is congruent to their own role orientation.

METHODS

This was a cross-sectional survey study, in which data was collected using self-administered questionnaires. Eligible cancer patients were consecutively sampled from October 2009 to December 2009 in the waiting room of the adult oncology clinic of University Malaya Medical Centre. Both the patients and their oncologists were approached by a researcher (CCMH) who was not involved in the patients' care. Sample size was determined using an online sample size calculator developed by Raosoft Inc,⁽²³⁾ which recommended a sample size of 152 to accurately (95% confidence interval) represent a variable with 50% distribution in an assumed population size of 250 individuals.

Of the 150 cancer patients who were approached, 133 (89%) agreed to participate in the survey and provided informed consent in accordance with the protocol approved by the institutional medical ethics review committee. Patients who declined to participate did not differ in their clinical assessment (i.e. staging), as screened by the oncologist, and no further information was obtained from them. Of the 133 patients, 33 were subsequently excluded, as they did not meet the criteria for study eligibility (e.g. receiving treatment for psychiatric or comorbid chronic conditions such as diabetes mellitus), leaving a total of 100 participants, out of which only 80 questionnaire sets were complete and used for analysis.

We sought to include all patients and physicians who met the eligibility criteria. The basic criteria for inclusion in the study were English literacy and at least 18 years of age. Patients with first-onset cancer diagnosis who were undergoing adjuvant chemotherapy were pre-screened and included if consent was given. In addition, patients who did not manifest any of the following exclusion criteria (which would have already precluded their eligibility to participate in the study) were included into the study: (1) prior cognitive

impairment; (2) premorbid psychiatric history; (3) comorbid chronic conditions; and (4) patients who had been diagnosed after one month (patients may be facing psychological adjustment during the first month following diagnosis) or had completed the consolidation therapy less than six months ago.

Two validated instruments were employed for use in this study, namely the Patient-Practitioner Orientation Scale (PPOS)⁽¹⁰⁾ and the Short-Form Patient Satisfaction Questionnaire (PSQ-18).⁽²⁴⁾ The PPOS was designed to measure the role orientation preferences of either the patient or physician toward aspects of the doctor-patient relationship. Preliminary testing via a pilot indicated an alpha of 0.881 ($n = 13$) for the PPOS, which consisted of 20 items on the dimensions of sharing (the degree to which information and control is shared) and caring (the degree of importance attached to warmth and support in the patient-physician relationship) on a six-point Likert scale. Additionally, the PPOS has comprehensive psychometric properties and had been extensively used and cross-culturally validated in numerous studies.⁽²⁵⁻³¹⁾ Only patient participants were requested to complete the PSQ, which contained 13 items with an acceptable internal consistency alpha of 0.745 ($n = 16$). Patient participants completed both the PSQ and PPOS, while the primary oncologist(s) for the participating patients were requested to complete only the PPOS.

The role orientations (patient-centred vs. doctor-centred) of 80 adult cancer patients and their oncologists were assessed using the PPOS. Comparisons of mean PPOS scores between patient and physician were then used to determine congruence (or non-congruence) between cancer patients and their primary oncologist(s), and its relationship to patients' satisfaction with the care provided by their oncologists (as measured by the PSQ) was calculated. All statistical analyses were conducted using the Statistical Package for the Social Sciences version 15 (SPSS Inc, Chicago, IL, USA) software. All assumptions of equality of variance and normality were checked using Levene's and Shapiro-Wilks tests, respectively. Some outliers were removed to meet this assumption.

RESULTS

A total of 80 cancer patients and 12 oncologists were included in the study. The response rate was 89% for patients and 100% for physicians. The participants' demographic characteristics were similar to those of national samples.⁽³²⁾ The mean age of the physicians was 34.50 ± 3.12 years, and seven (58.33%) physicians were female. The mean age of the patients was 50.50 ± 16.46 years. A breakdown of the age range is provided in Table I. A slight female predominance was observed ($n = 45$, 56.25%). The majority of patients were Chinese ($n = 33$, 41.25%), while Islam was the main religion ($n = 26$, 32.50%). Of the 80 patients, 24 (30.00%) were stage III cancer patients and 21 (26.25%) were stage II cancer patients. The most common site of cancer was gastrointestinal (upper and lower), with 17 (21.25%) patients (Table I).

Table I. Demographics of cancer patients and their respective physicians (n = 92).

Demographic	No. (%)	
	Patients (n = 80)	Physicians (n = 12)
Mean age \pm SD; range (yrs)	50.5 \pm 16.46; 19–92	34.5 \pm 3.12; 29–40
Gender		
Male	35 (43.75)	5 (41.67)
Female	45 (56.25)	7 (58.33)
Age (yrs)		
18–39	18 (22.50)	
40–54	31 (38.75)	
55–70	22 (27.50)	
> 70	9 (11.25)	
Ethnic background		
Malay	25 (31.25)	
Chinese	33 (41.25)	
Indian	20 (25.00)	
Others	2 (0.025)	
Religion		
Islam	26 (32.50)	
Buddhism	16 (20.00)	
Hindu	11 (13.75)	
Christianity	9 (11.25)	
Others	18 (22.50)	
Cancer stage		
I	9 (11.25)	
II	21 (26.25)	
III	24 (30.00)	
IV	16 (20.00)	
Unclassified	10 (12.50)	
Cancer type		
Haematological	11 (13.75)	
Colorectal ^a	9 (11.25)	
Breast	8 (10.00)	
Pancreas & hepatobiliary ^b	8 (10.00)	
Stomach & esophageal	8 (10.00)	
Small intestine ^c	2 (2.50)	
Gynaecological	3 (3.75)	
Lung	4 (5.00)	
Urogenital ^d	3 (3.75)	
Prostate	2 (2.50)	
Head and neck	6 (7.50)	
Primary CNS	4 (5.00)	
Melanoma & other skin	3 (3.75)	
Soft tissue & bone tumours	2 (2.50)	
Thyroid	1 (1.25)	
Unknown primary origin	6 (7.50)	

^aLower GI, ^bUpper GI, ^cIncludes duodenal, ^dBladder, kidney and testis
SD: standard deviation; GI: gastrointestinal; CNS: central nervous system

The mean and standard deviation (SD) of the data are shown in Table II. The sample as a whole was highly patient-centred (overall mean: 4.66 \pm 0.585 and 4.97 \pm 0.088 for patients and physicians, respectively). Patient satisfaction was also relatively high, with an average score of 3.54 \pm 0.605 (out of 5, which was the highest possible score). Overall, the margin of difference between patient and physician PPOS scores was very slight, with an overall mean differential of 0.31 \pm 0.602 points.

Table III shows the results of an independent *t*-test that was used to compare the difference between the mean PPOS scores

Table II. Descriptive statistics for the sample (n = 80).

	Mean \pm SD (range)
Patients	
Patient satisfaction	3.54 \pm 0.605 (2.23–4.92)
Sharing subscale	4.28 \pm 0.731 (2.45–5.92)
Caring subscale	4.94 \pm 0.707 (2.88–6.00)
Grand mean	4.66 \pm 0.585 (3.04–5.84)
Physicians	
Sharing subscale	4.65 \pm 0.237 (4.25–4.88)
Caring subscale	5.26 \pm 0.270 (4.94–5.75)
Grand mean	4.97 \pm 0.088 (4.89–5.15)
Differential	
Sharing	0.37 \pm 0.721 (–1.25 to 2.32)
Caring	0.32 \pm 0.728 (–0.90 to 2.46)
Grand mean	0.31 \pm 0.602 (–0.95 to 2.11)

SD: standard deviation

Table III. Comparison of means between patient and physician PPOS scores.

Indication	Mean \pm SE	<i>t</i> -stat	p-value
Sharing subscale			
Patients	4.28 \pm 0.082	–1.67	0.097
Physicians	4.65 \pm 0.123		
Caring subscale			
Patients	4.94 \pm 0.079	–1.42	0.159
Physicians	5.26 \pm 0.101		
Grand mean			
Patients	4.66 \pm 0.065	–1.75	0.084
Physicians	4.97 \pm 0.071		

SE: standard error

of the patient and physician. There was no significant difference between the two groups ($p > 0.05$), with patient and physician PPOS scoring equally high across the sharing and caring subscales as well as the grand mean, although the physician PPOS scores were slightly higher than those of their patients. The high overall PPOS scores indicated patient-centred role orientations in both groups, thus representing a good doctor-patient fit.

Pearson's product-moment correlation coefficient (Pearson's *r*) was first used to assess the relationship within the various PPOS scores ('sharing' and 'caring' subscales and grand mean). Table IV summarises the strong correlations between the PPOS grand mean and the subscales of 'sharing' ($r = 0.81$) and 'caring' ($r = 0.81$). Within the subscales, a positive correlation were also found between 'sharing' and 'caring' ($r = 0.38$). We also used Pearson's *r* to determine the relationship between the PPOS scores and the PSQ-18 (patient satisfaction) scores. Moderately high positive correlations were found between patient satisfaction and the PPOS subscales ('sharing' $r = 0.48$; 'caring' $r = 0.46$). The strongest correlation emerged between the PPOS grand mean and patient satisfaction ($r = 0.56$), indicating that patient-centred role orientation was linked to patient satisfaction (two-tailed significance value, $p < 0.01$).

Further analysis of the relationship between PPOS differential scores or patient-physician congruence with patient satisfaction suggested that a smaller patient-physician differential score (greater similarity in terms of role orientation) corresponded with high patient satisfaction scores ($r = 0.48$, $r = 0.46$ and $r = 0.56$ for

'sharing', 'caring' and grand mean, respectively). These findings demonstrate that a stronger doctor-patient fit is related to higher levels of patient satisfaction.

DISCUSSION

Our results suggest that cancer patients, in the context of an impending consultation, strongly prefer a patient-centred approach to care. The study also found a strong doctor-patient fit, which in turn, was related to higher patient satisfaction. However, it remains unclear whether all patients, regardless of demographic differences and health status, prefer patient-centred physicians. Data from previous Western studies are not generalisable due to sample issues such as differences in health statuses and clinical settings. Our results are likely to be more representative of a cancer context rather than primary care, which was the focus in most previous studies.^(13,14) Furthermore, there is no clear evidence with regard to patient preference for care in non-Western samples.⁽¹²⁾ This study does not provide evidence for previous studies, which show that patients in poorer health are more likely to be doctor-centred.^(33,34) The cancer patients from our sample defied this expectation, as they were decidedly patient-centred, supporting general evidence for patient preference and satisfaction with a patient-centred approach.⁽¹⁰⁾

The high patient-physician congruence obtained could be attributable to the patient-centred orientation of both the patients and physicians in our study. This may be because cancer is now more commonly managed as a chronic condition rather than an acute one.⁽³⁵⁾ In addition, cancer patients at our centre are generally active participants in their own care, and are taught self-management or essential patient-centred skills early.⁽³⁶⁾ Therefore, although no formal patient activation programme has been implemented at our centre, a partnership approach to care is essentially being used. This may be due to the training background of the majority of oncologists in the country, i.e. most are traditionally trained in the United Kingdom, as were the physicians in our study.

The current findings for patient satisfaction could be attributed to the highly congruent patient-physician orientation, which is remarkable, considering the fact that the patients were randomly assigned to the oncologists, as well as the racial, ethnic and religious diversities seen among the patients attending these consultations. However, it is likely that the high doctor-patient fit in this study was due to the fact that the patients were well acquainted with their physicians through established doctor-patient relationships, thereby allowing for increased time to build rapport and develop continuity of care.

The present study shows that the cancer patients in this sample (as well as their physicians) had an especially strong patient-centred role orientation, which lends moderate support to studies which found that patients prefer and are more satisfied with patient-centred care.^(10,28) However, evidence from past research has shown that a minority of patients,⁽²⁹⁾ specifically cancer patients, may prefer a doctor-centred approach to care.^(3,5,37)

Table IV. Correlation between PPOS means and patient satisfaction.

Pearson correlation	Sharing subscale	Caring subscale	Grand mean	Patient satisfaction
Sharing subscale	1	0.376*	0.807*	0.477*
Caring subscale		1	0.814*	0.458*
Grand mean			1	0.561*
Patient satisfaction				1

*Correlation is significant at the 0.01 level (2-tailed).

Therefore, physicians should show flexibility through tailoring care to individual preference⁽³⁸⁾ and be sensitive to cultural differences. This will increase patient satisfaction as well as establish greater rapport and doctor-patient fit, which would help foster patient involvement with their own care at each stage of the cancer continuum.

Although our sample size was small, it was comparable to that of other studies conducted in this area,⁽³⁹⁻⁴¹⁾ where small patient sample size is an inherent problem.⁽¹⁴⁾ The study may have been more representative if we had a larger sample size. Other caveats include the non-examination of some potential mediating factors such as duration of illness and socioeconomic factors, physician background characteristics (e.g. training background, race and ethnicity), which were not taken into account in this study. To overcome the above limitations, a prospective study could be designed in future to examine whether role orientation and subsequent doctor-patient fit may vary over time. Additionally, it would be interesting to determine whether patient satisfaction would be similarly correlated if both the patient and physician are doctor-oriented.

In conclusion, our results offer insights into the relationship between patient-physician congruence and patient satisfaction in a multicultural setting. This paper addresses the need for greater understanding of local consultation preferences and styles.^(5,19,22) The significance of this study and its contribution to the field cannot be discounted, as it takes the first step toward remedying a neglected area in the field of medicine. Further research is required in order to allow replication, identify areas for improvement and to allow for generalisation and better understanding of the dynamics of patient-physician relationships in the cancer care context.

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