

Satisfaction and correlates of patients' satisfaction with physicians' services in primary health care centers

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ABSTRACT

Objective: To estimate quantitatively consumers' satisfaction and correlates of satisfaction with physicians' services provided by Ministry of Health Primary Health Care Centers in attending consumers.

Methods: Consumers (n=540) attending the selected Primary Health Care Centers in Riyadh were asked about their satisfaction with physician's services. Eight Primary Health Care Centers were randomly selected according to the geographical location, two from each geographical zone. Seventy-five subjects were selected systematically where every tenth Saudi aged 15 years and above who visited the selected Primary Health Care Centers during the study period was chosen. Data was collected via a self administered pilot tested, internally consistent patient satisfaction questionnaire which included socio-demographic characteristics as well as the overall and differential satisfaction with the different aspects of physicians' services in the selected Primary Health Care Centers rated in a scale of 1–5 points, the higher the score the higher the satisfaction.

Results: The results revealed that males constituted 60%, and 58% of all patients were married, more than 60% were employees and more than 70% have a monthly income of less than 6000 Saudi Riyals. Almost 95% have an open

file in the Primary Health Care Center and 39% think that the distance to the Primary Health Care Center is far or very far. The summary satisfaction score was 3.77 points and the mean satisfaction with the services provided by physicians was 2.56 points out of a maximum of 5 points. The highest satisfaction was for discussing psychological aspects of patients' problems (2.96 points) and the lowest was for attentive listening to patients' complaints (2.22 points). Physicians' communication skills were more satisfactory to patients than their professional skills and satisfying patients' wishes scored the lowest satisfaction. Unskilled laborers, literate patients and patients with higher income showed significantly higher mean satisfaction while students, illiterates, those aged less than 50 years and patients with income less than 6000 Riyals per months scored the lowest satisfaction. The longer the distance travelled the lower the satisfaction scores but having a file or not was not related to satisfaction.

Conclusion: Some physicians' service items need corrective intervention and students and young patients appear to need more attention.

Keywords: Primary care, sociodemographics, physicians, satisfaction.

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Patients' satisfaction with provided health services has become an explicit organizational goal for improving quality and accessibility while controlling cost.^{1,2} Consumers' satisfaction with physicians' services and other provided health services has been

widely studied mostly in developed countries. Patients perceptions were used to measure overall quality and are valued as an outcome measure for consultations and other encounters between providers and consumers particularly between doctors and

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patients.^{3,4} Evidence points to that dissatisfied consumers with health care provided particularly physicians' services are less likely to adhere to recommended course of treatment or return to follow up visits.⁵ On the other hand satisfaction with ambulatory care, particularly physicians' care, has significantly influenced consumers behaviour in searching health care, complying with treatment and returning to the same care setting.⁵ Several tools were used to study consumers satisfaction. These include interviews and open ended questions which produced detailed information but usually difficult to analyse. More structured multiple items questionnaires with Likert scale response categories produce data which can be handled easily but required close attention to validity and reliability. The Medical Interview Satisfaction Scale (MISS) and Patient Satisfaction Questionnaire (PSQ) developed in the United States and the Consultation Satisfaction Questionnaire (CSQ) developed in the United Kingdom^{6,7} for assessing satisfaction in primary health care settings were widely used. They were found to be sufficiently reliable and information is unlikely to be lost if a total general score of satisfaction is calculated.⁸ The present study which, to the best of our knowledge, is the first of its nature and scope in trying to determine satisfaction with physicians' services quantitatively and studying the correlates of satisfaction in 8 PHCCs and 540 subjects in Riyadh City. Physicians are generally considered as the health team leaders and satisfaction with their services is crucial to overall satisfaction with other services. We think that such studies are needed, particularly in Saudi Arabia which has reoriented its ambulatory health system according to the Alma Ata approach for about two decades. Assessing how this system is functioning and identifying strengths and weaknesses is an evaluation process which needs to be undertaken for corrective measures and for proper expansion of the service. This study is one attempt in that pursuit.

Methods. This study is a facility based study in the Primary Health Care centres (PHCCs) in Riyadh city. The study sample consisted of every tenth consumer visiting the selected PHCCs during a one month period (September 1998) whose age was 15 years and above. On geographical basis, 8 PHCCs were selected, two from each geographical zone. Seventy-five consumers were selected from each PHCC as the Saudi patients load is generally similar in the selected PHCCs. The selected subjects were informed about the objectives of the study and that their participation is voluntary, and were assured that data collected will be used only for the stated research purposes. To give full freedom for subjects to express their real and true assessment of services an anonymous self administered questionnaire was used. This was based on a translated, modified version of the patient satisfaction questionnaire

(PSQ) and consultation satisfaction questionnaire (CSQ) with standardized Likert scale of 1–5 points. Further modifications were introduced in the tool according to the pilot test results. The questionnaire included in addition to the sociodemographic characteristics of subjects, their attitudes and satisfaction with different aspects of physicians' services such as communication and professional skills, as well as his concern and interest in the patient as a human being. The internal consistency of the satisfaction score with the physician services was examined using Cronbach's alpha which was found to be 0.935. Trained Health Service Administration students from the College of Applied Medical Sciences were available to answer subject's queries and fill in questionnaires for illiterate subjects and for any needed help or clarification for literate subjects. Collected data was manually checked for completeness before being entered into an IBM personal computer and was statistically analyzed using Statistical Package for Social Science (SPSS) for Windows, version.⁸ One way analysis of variance (ANOVA) and t-test were used to compare satisfaction scores of the different aspects of physicians' services according to the background variables studied (sociodemographics, distance, and open file). Multiple linear regression analysis was undertaken to study the association of background variables as independent variables with the satisfaction score as dependent variable.

Results. Sixty subjects (10% of the total) were excluded from final analysis due to incomplete information. They did not appear to significantly differ from the rest of the subjects according to the background variables studied. Almost 95% of the subjects have a file in the PHCCs. About 61% of the patients live near the centers, 30% far and 9% very far from the centers. The status of having an active file or not was not associated with satisfaction with the physicians' services offered. The longer the distance from patient's residence to the PHCCs the lower the satisfaction scores with all aspects of physicians' services offered but differences were not significant. The overall satisfaction with all services provided as assessed by patients' response to one summary question was 3.77 points and the overall mean satisfaction taking in consideration satisfaction scores for all individual service items was 2.56 points out of 5 points. Table 1 profiles the sociodemographics of the studied sample (540 subjects) and the mean satisfaction score for physicians' services. The great majority of the subjects were young, married with intermediate/secondary school education working as employees in government agencies, with a monthly income of less than 6000 Saudi Riyals or less (1 US\$ = 3.75 Saudi Riyals). The mean satisfaction score with

Table 1 - Sociodemographic characteristics of subjects and their overall and physicians' satisfaction scores with services provided.

Sociodemographic characteristics		Percentage	Physicians' satisfaction score
Age (Years)	15-19	51.5	2.52*
	30-49	42	2.47
	50-80	7	2.68
Gender	M	60	2.55
	F	40	2.57
Marital status	Married	58	2.54
	Single	3	2.61
	Previously Married	8	2.46
Education	Illiterate	5	2.30
	Elementary	17	2.56
	Intermediate/ Secondary	50	2.57
	University	32	2.57
Occupation	Employed	62	2.55*
	Private	16	2.54
	Student	4	2.3
	Unskilled	12	2.7
	Unemployed	8	2.45
Income (month) SR	< 4500	29	2.39*
	< 6000	42	2.57
	< 9000	20	2.73
	9000 +	9	2.69
Mean satisfaction			2.56
*significant at p=0.05			

Table 2 - Patients' satisfaction scores with physicians' service items.

Physicians' service items	Mean score	Factors		
		Communication	Skills	Request
Interpersonal communications				
Answer patients' questions	2.64	.756		
Explain patients' problem	2.69	.801		
Explain treatment	2.59	.816		
Discuss social and psychological aspects	2.96	.785		
Mean score	2.71			
Physicians' professional skills:				
Listen carefully and attentively to patients' complaints	2.22		.828	
Appreciate the real reason for patients' visit	2.28		.856	
Physical examination	2.70		.756	
Give preventive advice	2.77		.714	
Mean score	2.49			
Request				
Laboratory tests	2.43			.675
Follow up appointment	2.65			.641
Referral to hospital	2.23			.719
Mean score	2.44			

Table 3 - Multiple regression analysis of variables associated with satisfaction with the physicians' services offered.

Variable	Standardization regression coefficient
Age	-0.183*
Gender	-0.004
Marital status	0.029
Education	-0.117*
Income	0.203**
Distance	0.019
Active file	0.032
*significant at p=0.05, **significant at 0.01	

physicians' services was 2.56 points. There were no significant differences according to the sociodemographic variables studied except for age, education and occupation. Unskilled laborers showed the highest scores and students the lowest scores. Patients aged less than 50 years of age, with lower education and income levels showed significantly lower satisfaction scores. Table 2 shows satisfaction scores with the different aspects of physicians' services and factor loading for principal component analysis performed on the mean scores of physicians' services. Results showed that the three groups (communication, professional skills, satisfying patients wishes) explained 74% of the total variance. Communication accounted for 41%, skills for 23% and patients' wishes 10% of the total variance. The highest score was for discussing social and psychological aspects of health problem (2.96 points 59%) and the lowest was for offering referral to hospital and listening with patience to patients complaints (2.22 points 44%). Only income was significantly associated with some aspects of physicians services. Subjects with monthly income 6000 – 9000 Saudi Riyals scored significantly higher satisfaction with physicians' ability to identify major reasons for consumer's visit, explaining all dimensions of problem and responding to all queries. All other variables were not significantly associated with satisfaction. Elements of interpersonal communications scored the highest satisfaction score of 2.71 points, followed by physicians' professional skills (2.49 points) and satisfying patients' requests scored 2.44 points. No significant association was found in these three groups and the background variables studied. Table 3 shows the multiple regression analysis of the sociodemographic variables in addition to travelled distance and

whether the subject has a file (independent variable) with the mean satisfaction score of physician services (dependent variables). Age, income, and education have contributed significantly to satisfaction scores. Gender, marital status, distance and having a file in the PHCCs did not significantly contribute to satisfaction scores. The set of independent variables included in the equation accounted for about 51% of the total variation of the overall satisfaction score for physician services.

Discussion. The overall consumers' satisfaction with provided services in this study as assessed by one summary question is 75% (mean score of 3.77 points out of 5). Previous studies in the Saudi Arabia and neighbouring countries reported satisfaction scores ranging from 60-90%.⁹⁻¹⁴ Satisfaction with physicians' services in our study was 2.56 points (51%) which is low but better compared to studies in Jeddah City in Saudi Arabia (2.31 points) and Kuwait City in Kuwait (2.21 points).^{11,14} Satisfaction with physicians' services are of paramount importance to satisfaction with PHCCs services. Service items of poor satisfaction include attentive listening to patients complaints and satisfying patients wishes for laboratory tests, referral to hospital and giving follow up appointment. These findings are remarkably similar to findings in Jeddah City study.¹¹ The problem of lack of humane listening to patients needs to be corrected and physicians need to be reminded about that offering them the necessary time to do it and proper training if needed. No wonder then that the majority of patients in Riyadh believe that listening carefully to patients' complaints is an important characteristic of ideal physicians.¹⁰ Satisfying patients wishes is not always necessary. Ordering laboratory tests, referral to secondary care and giving follow up appointment are all professional decisions and usually fulfilled by physicians if deemed professionally and ethically needed. Patients need to be educated in this respect and that complying with all their wishes can have negative consequences on their own health in addition to wasting valuable resources. Satisfaction with communication skills of physicians in our study is better than professional skills but still of low value and there is a need for improvement since interpersonal communication appears to be a major factor in satisfaction and utilization of health services. Most complaints of patients are about poor communication of the physician and not about professional competency and that listening and understandable communication were associated with higher satisfaction scores. Studies have confirmed that physicians can enhance satisfaction by spending a small time chatting with patient and by allowing sufficient time for exchange with him with more understandable explanation and information.¹⁵⁻¹⁹

Training in communication skills increases open discussion and may produce greater physician sensitivity to patient satisfaction.²⁰ Patients in our study were complaining of the reluctance of the physician to refer them to hospitals. Referral from primary to secondary care is a professional decision and usually granted if professionally justified. Saudi patients may sometimes insist on referral to hospital because they think that the care is much better. This is not necessarily true and this phenomenon should be strongly discouraged professionally and if need be, administratively. It is the duty of the physician to discuss with the patients the issue. Studies have demonstrated the importance of involving patients in decision making and giving them information about their referral to hospital.²¹ The results of this study appear to reveal no significant consistent pattern of association of satisfaction with physicians' services with the variables studied except for age, occupation and income. Older patients, patients with higher monthly income and higher educational level tend to have significantly higher mean satisfaction scores for physicians' services offered. These findings are in accordance with findings of many similar studies.^{13,21-25} Older subjects are generally more conservative and less demanding than younger. The highest satisfaction mean score was for laborers and the lowest score was for students. Why students are showing the lowest satisfaction score is not clear. We can only give our speculations here. Students are of young age and those are generally more demanding. In addition students may visit PHCCs for sick leaves or medical reports to skip classes or exams and these documents are usually issued by school health services. Hence it is not unexpected for students if they were seeking these excuses to be less satisfied if they could not obtain them. As for distance the situation in Saudi Arabia appears to be similar to other countries. The longer the distance travelled the lower the satisfaction with services provided in accordance with findings of many studies on the association of distance on utilisation and satisfaction with ambulatory care.²⁶ The background variables in our study accounted for an average of 51% of the variation in the total satisfaction score with physicians' services provided compared to 15-62% in international studies.^{2,13,27,28}

In conclusion this study showed that satisfaction with physicians' services varied with some subjects' sociodemographic characteristics. Lower satisfaction was reported among students, younger patients and those with lower income and educational levels. These categories may need to be further studied in depth. If their low satisfaction levels with physicians' services are confirmed, then the important factors associated with the low satisfaction need to be identified. Such data is vital for any corrective measures to boost satisfaction of all attending consumers with physicians' services provided.

Future studies should cover satisfaction with all other services provided in PHCCs with additional parameters such as physicians' and other health manpower characteristics, resources and service organisation, travel and waiting times, work hours, as well as the attitudes of the patient towards life itself.

References

- Ross K, Steward C, Sinacore J. The importance of patient preferences in the measurement of health care satisfaction. *Med Care* 1993; 31: 1138-1149.
- Flocke S. Measuring attributes of Primary Care: Development of a New Instrument. *J Fam Pract* 1997; 45: 64-74.
- Williams B. Patient satisfaction: a valid concept. *Soc Sci Med* 1994; 38: 509-516.
- Van Campen C, Sixma H, Friel R, Kersens J, Peters L. Quality of care and patient satisfaction: a review of measuring instruments. *Med Care Res Rev* 1995; 52: 109-133.
- Zemencuk J, Hayward R, Skarupski K, Katz S. Patients' desires and expectations for medical care: A challenge to improving patient satisfaction. *Am J Med Qual* 1999; 14: 21-27.
- Wolf M, Putman S, James S, Stiles W. The Medical Interview Satisfaction Scale: Development of a scale to measure patient perceptions with physicians behaviour. *J Behav Med* 1978; 1: 391-401
- Baker R. Development of a questionnaire to assess patients' satisfaction with consultation in general practice. *Br J Gen Pract* 1990; 40: 487-490.
- Kinnersley P, Stott N, Peters T, Harvey I, Hackett P. A comparison of methods for measuring patient satisfaction with consultation in primary care *Medicine* 1996; 13: 41-51.
- Mansour A, Al-Osimy M. A Study of satisfaction among Primary Health Care patients in Saudi Arabia. *J Community Health* 1993; 18: 163-173.
- Al-Faris E, Khoja T, Falouda M, Saeed A. Patients' satisfaction with accessibility and services offered in Riyadh health centers. *Saudi Med J* 1996; 17: 11-17.
- Al-Doghaither A, Saeed A. Consumers' satisfaction with primary health services in the city of Jeddah, Saudi Arabia. *Saudi Med J* 2000; 21: 447-454.
- Harrison A. Patients' evaluations of their consultations with primary health clinic doctors in the United Arab Emirates. *Fam Pract* 1996; 13: 59-68.
- A-Doghaither A, Abdelrahman B, Saeed A. Patients' satisfaction and their sociodemographic correlates of satisfaction with physicians' services in primary healthcare centres in Kuwait City. *JRSJ* 2000; 120: 170-174.
- Abd Al Kareem A, Aday L, Walker G. Patient satisfaction in Government health facilities in the State of Qatar. *J Community Health* 1996; 21: 349-358.
- Daniel A, Burn R, Horarik S. Patients complaints about medical practice. *Med J Aust* 1999; 170: 598-602.
- Gross D, Zyzanski S, Borawaski E, Cebul R, Stange K. Patient satisfaction with time spent with their physician. *J Fam Pract* 1998; 47: 133-137.
- Young A, Byles J, Dobson A. Women's satisfaction with general practice consultations. *Med J Aust* 1998; 168: 383-389.
- Sixma H, Preeuwenberg P, van der Pasch M. Patient satisfaction with the General Practitioner: a two-level analysis. *Med Care* 1998; 36: 212-229.
- Whitworth J, Pickering H, Mulwany F, Ruberantwari A, Dolin P, Johnson G. Determinants of attendance and patient satisfaction at eye clinics in South Western Uganda. *Health Policy Plan* 1999; 14: 77-81.

20. Hall J, Roter D. Patient gender and communication with physicians: results of a community-based study. *Women's Health* 1995; 1: 77-95.
21. Greenshow D, Howit A, Kinnersley P. Patient satisfaction with referral to hospital: relationship to expectations, involvement, and information-giving in the consultation. *Br J Gen Pract* 1998; 48: 911-912.
22. Mainous A, Griffith C, Love M. Patient satisfaction with care in programs for low income individuals. *J Community Health* 1999; 24: 381, 391.
23. Phillips D, Brooks F. Age differences in women's verdicts on the quality of primary health care services. *Br J Gen Pract* 1998; 48: 1151-1154.
24. Haq M. Understanding older adult satisfaction with primary health care services at a nursing center. *Appl Nurs Res* 1993; 6: 125-131.
25. Sargeant A, Kaehler J. Factors of patients satisfaction with medical services: the case of G.P. practices in the U.K. *Health Mark Q* 1998; 16: 55-77.
26. Saeed A. Effect of distance on the utilization of health services. *CAMS Newsletter* 1985; 1: 7-9.
27. Reifel N, Rana H, Marcis M. Consumer satisfaction. *Adv Dent Res* 1997; 11: 281-290.
28. Marsh G. Measuring patient satisfaction outcomes across provider disciplines. *J Nurs Meas* 1999; 7: 47-62.