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Patients' recommendation of doctor as an indicator of patient satisfaction

以病人是否願意推薦醫生作為病人對醫生是否滿意的指標

Objectives. To determine whether patients' recommendation of their family doctor to others correlates with patient satisfaction scores, and to investigate other factors influencing patients' recommendation of doctor.

Design. Self-administered patient questionnaire.

Setting. Thirty-six family practice clinics, Slovenia.

Patients and methods. A total of 2160 consecutive adult patients attending the clinics were approached to complete a self-administered questionnaire, to be returned in a prepaid envelope. The questionnaire included validated tools, such as the EUROPEP questionnaire on patient satisfaction and gathered data on health-related quality of life, patient demographic, socio-economic and health characteristics, and attitudes and experience of health services. Patients also selected a response to the statement "I can strongly recommend my family doctor to my friends" on a five-point scale, from strongly disagree to strongly agree.

Results. Overall, 92% of respondents were in agreement with the statement that they would strongly recommend their family doctor to their friends. Patient satisfaction in the group of patients strongly agreeing with the statement was 11.1 points higher than that for the group responding they agreed only (92.4 versus 81.3 points; $P < 0.001$). Multivariate analysis showed that 51.5% of the variation in the response to the statement could be explained by patient, doctor, and practice characteristics investigated.

Conclusions. Higher agreement with the statement "I can strongly recommend my family doctor to my friends" was shown to be associated with higher patient satisfaction with the doctor's working style, with some patient demographic characteristics, aspects of patients' health care utilisation, and some doctor characteristics. Using a simple question regarding recommendation of the doctor to friends can be used as a surrogate measure of patient satisfaction, but should be interpreted with caution.

目的：檢視病人推薦自己的家庭醫生與他們對醫生滿意的程度是否相關，並探討影響推薦的其他因素。

設計：由病人自行完成問卷。

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患者與方法：邀請到診所求醫的連續 2160 名成年人自行填寫一份問卷，以回郵信封寄回。問卷採用了已確認為有效的調查工具，如 EUROPEP 調查病人滿意程度的問卷，並搜集以下各方面資料，包括與健康有關的生活素質，病人在人口統計學、社會經濟、健康三方面的特徵，他們對公共醫療衛生服務的態度，以及使用這些服務的經驗。病人也就「我會向朋友大力推薦我的家庭醫生」這句陳述表態，從極不同意到非常同意的五分量表上選取答案。

結果：整體來說，92% 的病人認為他們會向朋友大力推薦自己的家庭醫生。表示非常同意的病人，他們的滿意程度與僅表示滿意的病人組別相比，要高 11.1 點 (92.4 點比 81.3 點； $P < 0.001$)。多元分析的結果顯示，對以上陳述的回應，51.5% 的偏差可以從本研究所探討的病人、醫生和診治方面的特點來解釋。

結論：病人對「我會向朋友大力推薦我的家庭醫生」這句陳述的同意程度與他們對醫生診治方式的滿意程度相關，同意程度越高，滿意程度也會越高。對該句陳述的同意程度又跟病人的一些人口特徵、病人使用公共醫療衛生服務的特點，以及醫生的特點有關。病人向朋友推薦醫生這道簡單問題，是可以用作反映病人滿意程度的替代度量的，但在詮釋結果時，我們必須謹慎處理。

Key words:

Europe, Eastern;
Family practice;
Health policy;
Patient satisfaction;
Quality of life

關鍵詞：

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Introduction

Patients play an important role in health care policy decisions and their evaluation of care can be used as a tool for quality improvement.^{1,2} Patients can express their views through complaint procedures, through changing doctors, and by expressing their opinion on the quality of services received.³ Gathering information on patient satisfaction in a systematic way is often a difficult task and consequently patients are often asked a simple question to determine satisfaction, such as whether they would recommend their family doctor to their friends. This question is derived from that used in other industries, and acknowledges that the patient is a customer in a health care business.³ It is widely accepted that the answer is a valid surrogate of the patient satisfaction score.

Characteristics including those of the health care system, the patient, the provider, and the provider setting have previously been studied to assess their impact on levels of patient satisfaction.⁴ Affordability, accessibility, availability, and equity, have been shown to play an important role in patient satisfaction with the health care delivery system.⁵ Older patients, women, patients with lower education, and frequent attenders are usually more satisfied patients.⁴ Patients tend to be less satisfied with younger doctors.^{6,7} The results of studies investigating differences according to patient sex and age have not yielded consistent findings, but the interpersonal relationship between doctor and patient seems to play an important role.⁷⁻⁹ Lower numbers of patients seen per hour, that is longer consultation times, the use of a regular doctor which enables good communication with the doctor, and the continuity of provider or provider setting are all associated with higher ratings of patient satisfaction.^{4,5,10,11} Solo practices tend to be given higher scores, due to more personal care.^{4,12,13} Patients value the availability of the doctor in urgent situations, the facilities, and the availability of appointments.¹⁴ During the consultation, they assess technical tasks, the interpersonal exchange, and the resources used in care.^{1,11}

Lower levels of patient satisfaction can lead to changing doctor and sometimes 'shopping around' for doctors.^{7,12,15} Changing doctor for reasons other than moving to another address can thus be seen as a patient's complaint about the care provided and used as an indication for quality improvements.^{1,12,16}

This study of patient satisfaction with family practice in Slovenia aimed to describe the level of patient satisfaction in patients who would highly recommend their family doctor to their friends compared to others, and to investigate characteristics of patients, doctors, and practices associated with the answer given to this question.

Patients and methods

Sampling

A sample of 36 family practice clinics in Slovenia was

used, stratified according to the sex of the doctor (15 male and 21 female doctors), the type of practice (group or solo practice), and location (urban area of 30 000 inhabitants or more, or a rural area). The practices were stratified in this way in order to ensure that they were representative of the country as a whole. Comparison of the practices in the sample and the data about family practice clinics gathered was made with national registry data. The sample of practices was found to be representative of family practice clinics in Slovenia.¹⁷ One family doctor per location was approached to participate in the study.

In March 1998, 2160 consecutive adult patients who attended these doctors on a randomly chosen day were offered a questionnaire in a prepaid envelope to fill in it at home. Patients with reading problems and those with severe mental illness were not invited to participate (eight cases). The questionnaires were sent to the research unit by mail. After 14 days, participants were posted a reminder to forward the questionnaire.

Questionnaire

A self-administered questionnaire was prepared. This included validated and tested instruments, such as the EUROPEP questionnaire on patient satisfaction,^{18,19} and the EuroQol 5D instrument for measuring wellbeing and functional status.^{20,21} The Duke-AD instrument was also included to measure health-related quality of life and the presence of anxiety and depressive symptoms.²² Questions on the use of health care services, demographic, socio-economic and health characteristics, as well as attitudes to and experiences with health services were included. Patients also selected an answer to the statement "I can strongly recommend my family doctor to my friends" on a five-point scale from strongly disagree to strongly agree.

Analysis

The Epi Info (Centres for Disease Control, Atlanta, US) statistical package was used for descriptive statistics. Multivariate analysis was performed using the Statistical Package for the Social Sciences (Windows version 6.0; SPSS Inc., Chicago, US).

Results

Responses from 1809 (84%) patients were used in the final analysis. The mean age of the respondents was 50 years (standard deviation [SD], 15 years). A total of 1158 (64%) respondents were women, and 686 (38%) were living in cities; 757 (42%) attended solo practices, 275 (15%) attended private doctors, and 829 (46%) attended practices with an appointment system.

Of 1793 (83.0%) patients who responded to the statement "I can strongly recommend my family doctor to my friends", a total of 93.2% agreed or strongly agreed with the statement (Table 1).

Table 1. Responses to the statement "I can strongly recommend my family doctor to my friends"

Statement	No. (%)
Strongly disagree	9 (0.5)
Disagree	17 (0.9)
Neutral	97 (5.4)
Agree	699 (39.0)
Strongly agree	971 (54.2)
Total	1793

The mean patient satisfaction score on the 23-item satisfaction questionnaire was 86.6 points (SD, 12.4 points). For the group of patients stating that they strongly agreed with the statement, the patient satisfaction score was 92.4 points, whereas for the group of patients who stated that they agreed, the patient satisfaction score was 81.3 points ($P < 0.001$). Factor analysis revealed three key factors in the satisfaction scale: doctor's working style, 86.2 points (SD, 13.3 points); practice organisation, 83.0 points (SD, 13.0 points); and phone communication, 90.7 points (SD, 16.3 points). Table 2 reports the correlation coefficients for patient satisfaction scores, these three factors, and responses to the statement "I can strongly recommend my family doctor to my friends".

Multiple regression analysis was used, with patient demographic and health status variables, along with practice and family doctor variables as independent variables, and the statement "I can strongly recommend my family doctor to my friends" as the dependent variable (Table 3).

Approximately 51.5% of the variation in the statement "I can strongly recommend my family doctor to my friends" was explained by the model overall. Higher agreement with the statement "I can strongly recommend my family doctor to my friends" was associated with higher satisfaction with doctor's working style and organisation of the health care system, and with the lack of an emergency home visit in the previous year.

Discussion

This study has a number of limitations. Firstly, it uses data reported by patients who attended family practice clinics, thus excluding patients who do not use primary care services regularly. Secondly, the study was completed in a country that is in transition from a social security model to an insurance model of payment for health care services. Lastly, there is some uncertainty regarding the validity of the question on patient willingness to recommend one's own family doctor. However, the large sample, high response rate, and the results which are in agreement with findings in other countries support the validity of the current results.^{18,19}

The study confirmed high overall patient satisfaction with family doctors as evidenced by patient satisfaction scores, which is in agreement with the findings of other researchers.^{4,5,19} High levels of satisfaction with the family doctor were also demonstrated by patients' willingness to recommend their family doctor to their friends, which was strongly correlated with overall patient satisfaction scores. This suggests that patient satisfaction with a family doctor over the previous year plays a considerable role in the patients' willingness to recommend the doctor to friends. Considering patients' health service utilisation style, demographic and health status data, and practice and family doctors' characteristics, 51.5% of the total variance in patients' willingness to recommend their doctor to their friends could be explained, with almost half of the variance not accounted for in the analysis conducted. Personality characteristics of patients and doctors may determine at least part of this unexplained variance and this could be investigated through further research.

The willingness to recommend one's family doctor to friends correlates well with patient satisfaction with the doctor. Given time and financial constraints in analysing services, this simple question can be used as a surrogate for

Table 2. Correlation coefficients for patient satisfaction scores, three key factors associated with patient satisfaction, and responses to the statement "I can strongly recommend my family doctor to my friends"

		Patient satisfaction	Doctor's working style	Practice organisation	Phone communication	"I can strongly recommend my family doctor to my friends"
Patient satisfaction	Pearson correlation	1.000	0.983	0.514	0.566	0.655
	P value (two-tailed)	.	0.000	0.000	0.000	0.000
	No.	1117	1117	1117	1117	1113
Doctor's working style	Pearson correlation		1.000	0.388	0.479	0.650
	P value (two-tailed)		.	0.000	0.000	0.000
	No.		1225	1200	1138	1220
Practice organisation	Pearson correlation			1.000	0.306	0.371
	P value (two-tailed)			.	0.000	0.000
	No.			1700	1469	1692
Phone communication	Pearson correlation				1.000	0.266
	P value (two-tailed)				.	0.000
	No.				1530	1525
"I can strongly recommend my family doctor to my friends"	Pearson correlation					1.000
	P value (two-tailed)					.
	No.					1793

Table 3. Multiple regression model for the statement "I can strongly recommend my family doctor to my friends" (R=0.723; R²=0.522, adjusted R²=0.515, df=9, F=73.803, P<0.001)

	Unstandardised beta coefficient	Standard error	Standardised beta coefficient	t value	P value	95% confidence interval	
						Lower limit	Upper limit
(Constant)	2.112	0.163	-	12.943	0.000	1.792	2.433
Satisfied with doctor's working style	2.878E-02	0.001	0.578	19.284	0.000	0.026	0.032
Emergency home visit in the previous year	-0.283	0.058	-0.167	-4.875	0.000	-0.397	-0.169
Satisfied with the organisation of the health care system	0.215	0.046	0.161	4.673	0.000	0.125	0.306
Intended to change family doctor in the near future	-0.537	0.128	-0.124	-4.196	0.000	-0.788	-0.286
Changed family doctor recently	0.287	0.106	0.079	2.715	0.007	0.079	0.494
Age of patients	-3.683E-03	0.001	-0.088	-2.938	0.003	-0.006	-0.001
Satisfied with mandatory joining of a family doctor list	-0.217	0.087	-0.072	-2.502	0.013	-0.387	-0.047
Family doctor does not think his job has a lot of unnecessary tasks	4.076E-02	0.016	0.073	2.565	0.011	0.010	0.072
Higher number of staff	9.285E-04	0.000	0.085	2.994	0.003	0.000	0.002

patient satisfaction in assessing quality of care. However, as with patient complaints, we should interpret this information with caution.¹⁶ Greater benefits can come from exploring negative statements which direct us to more detailed assessment of patient satisfaction. A comprehensive patient satisfaction questionnaire provides a more appropriate means for assessing a range of family practice features, including satisfaction with communication between patient and doctor, and the services provided.

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