

Patients' Attitudes towards Clinical Interviews in Various Fields of Medical Specialties

Samad Sajjadi¹, Majid Ahmadi¹,
Ehya Amalsaleh², Mohammad Sadegh
Mohaghegh Zadeh³

Abstract

Background: Although the physician-patient relationship is of special significance for a proper diagnosis, few studies have been done to find out how successful these interactions are across various medical specialties. Common physician knowledge measured by a questionnaire tended to view fields such as psychiatry more successful in achieving patient satisfaction than other specialties. However, the validity of such assumptions has rarely been assessed scientifically. The current study was designed to find out whether medical specialties with greater mental/emotional orientation, such as psychiatry, are more successful in achieving patient satisfaction than specialties with a stronger manual orientation, such as surgery.

Methods: A total of 27 physicians were randomly selected from different medical orientations. They were requested to use their common-sense to rate the specialties under study depending on whether they were more mentally oriented or manually inclined. They were also asked to indicate which groups of specialties are likely to be more successful in achieving patient satisfaction from clinical interactions. Another sample of 561 patients was selected from nine different medical specialty clinics based on a quota sample method. Patients were asked to complete a 15-item Communication Satisfaction Questionnaire following their clinical interviews with their physicians.

Results: The results obtained from the patients did not fully corroborate the results of the physicians' questionnaire, which predicted greatest patient satisfaction from psychiatrists. Our results showed that pediatricians and gynecologists were more successful in achieving patient satisfaction ($P < 0.001$) than psychiatrists.

Conclusion: Patients' satisfaction with different medical specialties is different from physicians' common-sense assumptions. Patients were more satisfied with pediatricians and gynecologists rather than psychiatrists.

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Introduction

Doctor-patient communication is an important issue in healthcare by which physicians and patients relate to each other to achieve therapeutic goals.^{1,2,3} More than

¹Department of English,
Paramedical College,
Shahid Beheshti Medical University,
Tehran, Iran.

²Department of English,

³Department of Statistics,
Paramedical College,
Shiraz University of Medical Sciences,
Shiraz, Iran.

Correspondence:

Samad Sajjadi PhD,
Department of English,
Paramedical College,
Shahid Beheshti Medical University,
Tehran, Iran.

Tel: +98 21 22715491

Fax: +98 21 227211

Email: ssajjadi2001@yahoo.com

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60% of medical diagnosis and treatment decisions are made on the basis of information collected during medical interviews.⁴ Successful communication can contribute to rapid recovery while problems in doctor-patient communication can exert negative effects on patient management.^{5,6,7} Despite its special significance, the doctor-patient communication has not been studied sufficiently.⁸ Therefore, numerous scholars have called for proper investigation of doctor-patient communication.^{1,8,9}

To investigate the topic more effectively, two hypotheses were formulated. The bases for the formulation of the hypotheses were (a) other researchers' calls for such investigations,¹ and (b) physicians' impression about the quality of clinical interviews across various specialties measured by a query (appendix A). Regarding previous research, Girgis and colleagues,⁹ for example, noticed different qualities of clinical interviews among various medical groups (e.g. surgeons, family physicians, and general practitioners) and, accordingly, called for further investigations on patients' attitudes towards clinical interviews across different medical specialties.^{9,10}

Method and Subjects

Physicians

Full name and address of all specialist doctors working in Shiraz, the capital city of Fars province, Iran, were obtained from the mailing list of local medical societies. Using a quota sampling method, 76 physicians (48 males and 28 females) were selected among nine specialties. The specialties investigated in the present study included internal medicine, general surgery, gynecology, ophthalmology, otorhinolaryngology, dermatology, pediatrics, psychiatry, and cardiology.

The number of physicians in each field of specialty varied in proportion to the total number of doctors belonging to that specialty. Their age ranged from 32 to 71 years with an average of 48 years. The particular specialties were selected because they were the most common fields accepting patients in different parts of the city.

Of the selected physicians, 69 agreed to let their patients participate in the study, yielding a participation rate of 91% for physicians. To do

so, the specialists' population was first divided into sub-groups in a stratified sampling. Based on a specified proportion, the physicians were randomly selected from each specialty.

Among the medical specialties under study, some were expected to have greater mental/emotional orientations while others to possess more manual inclinations.

To find out to which particular orientation each of the nine specialties is inclined, a total of 27 physicians were randomly selected from the different medical orientations and were requested to fill a query (appendix A). We asked them to use their common-sense to rate the specialties under the study from 1 to 9, depending on whether they were more mentally oriented or manually inclined. Number 1 meant to represent the most mentally oriented specialty and number 9 the most manually inclined (table 1).

The query also asked the physicians to indicate which groups of specialties (i.e. those with greater mental orientation or with more manual inclination) are likely to be more successful in achieving patient satisfaction from clinical interactions, by putting a tick mark inside the bracket before one of mentally oriented specialties or manually oriented specialties.

Patients

After obtaining the physicians' written consent to allow their patients participate in the study, we randomly asked a total of 10 patients per physician to complete the Farsi version of a 15-item Communication Satisfaction Questionnaire (CSQ) with a five-point scale ranging from the lowest (score 1) to the highest (score 5). The questionnaire (appendix B) was developed by Sajjadi based on the key principles of successful interactions, proposed by psychosocialists and clinical psychologists such as Kaplan and Sadock.^{12,13} Validity-wise the questionnaire was quite satisfactory. The appropriateness of the items forming the questionnaire was checked and then approved by specialist physicians, including psychiatrists and clinical psychologists. If content-wise an item did not satisfy the physicians, it was modified or deleted to ensure all the items measure what they are intended to. The Cronbach's alpha of the questionnaire was 0.83, indicating a very high consistency of the test items (or variables) in measuring the latent construct. The reliability

Table 1: Common-sense based ranking order for nine specialties under study, from the most mentally/emotionally inclined (rank 1) to the most manually oriented (rank 9)

Specialties	Psych-latry	Gyne-cology	Pediat-rics	Derma-tology	Internal medicine	Cardi-ology	Ophthal-mology	E.N.T.	surgery
Rating Averages	1.28	4.04	4.52	4.71	5.39	5.54	6.32	6.40	6.73
Ranks	1	2	3	4	5	6	7	8	9

Rank 1= most mentally/emotionally oriented, Rank 9 = most manually oriented, E.N.T: Otorhino-laryngology

alpha (Spearman Brown coefficient) of the questionnaire was 0.87 that showed a noticeable consistency in measuring patients' attitudes toward clinical interactions. To obtain the reliability coefficient, the test-retest reliability that is statistically treated as a variant of split-half reliability was used. Estimation in this reliability is based on the correlation between two administrations of the same items. In following this procedure, suitable measures were followed to avoid problems that might inappropriately affect the reliability. The measures included the allocation of suitable time intervals between the two administrations to avoid (a) a learning/practice effect, and (b) maturation effect.

The patients completed the questionnaires in physicians' private clinics (51%) or teaching hospitals affiliated to Shiraz University of Medical Sciences (49%). The views and attitudes of patients completing the questionnaire after clinical interviews with their physicians formed the bases for data. Using a quota sampling method, maximum of 10 accessible patients per physician were asked to complete the questionnaire. The researchers were well aware of the advantages of pure random sampling over a quota sampling. However, given the structure of the study and the limitations, quota sampling turned out to be the best option, which made it possible to select subjects among a suitable distribution of our demographic variables. The patients were recruited as they arrived and the researchers assigned them to demographic groups based on physicians' specialty. When the quota for a particular specialty was completed, the researchers stopped recruiting subjects from that particular group.

The average number of patients per physician who filled the questionnaire and whose data were analyzed (after discounting the drop-outs) was 6.16. The researchers' target was a total of 560 patients from the nine specialties, or an average of 60 patients per specialty. Nonetheless, to account for the drop-outs, the target sample was increased by 20% for both physicians and patients. With 69 specialist doctors allowing their patients to participate, a total of 690 questionnaires were distributed, resulting in 602 returns of which 41 questionnaires (6%) were dropped out for being incomplete. Analysis was then done on 561 questionnaires that formed 94% of the participants' responses.

The completed questionnaires were marked in a way that did not allow the identification of the patients. The method of collecting completed forms was chosen so that the patients could feel certain that their comments would remain anonymous. When necessary, code numbers were used. The questionnaires were

also labeled to indicate that their origin was a research body at Shiraz University of Medical Sciences rather than the patient's own doctor. This was conducted due to the belief that satisfaction of the patient might prevent expressing negative opinion. The questionnaire was intended to be self-administered so that the patients would find it easy to complete in the clinic's waiting room, right after their clinical interview with the physician. Patients' scores on the questionnaire were added up and averaged to identify the level of patients' satisfaction from their clinical interviews with their doctors.

Data Analysis

Scores for each patient were added up and averaged to obtain the mean that indicated the satisfaction rate. The average of 3.5 or over (out of 5) indicated patient satisfaction. The cutoff point to satisfaction was decided upon a consensus reached, following the researchers' consultation with a number of medical doctors, statisticians, and other faculty members, who were familiar with the objectives of the study and with the questionnaire design. The overall impression of research assistants, shaped as the result of their direct contact with patients filling out the questionnaire, was also considered in deciding upon the baseline score for patient satisfaction.

The Statistical Package for the Social Sciences (SPSS, version 9) was used to perform the computations. A number of descriptive statistics was carried out to identify the satisfaction rate in percent in relation to certain demographic features of the patients referring to specialist doctors, as it is shown in table 2 below. The computations were continued further to describe the percentage of satisfaction across various fields of specialty under study (table 3). The data were then subjected to Chi-Square tests to find out if the differences observed in different specialties were statistically significant.

Results

Most physicians (21 out of 27, 78%) indicated that mentally oriented specialties might be more successful in producing greater patient satisfaction than the manually oriented ones. Physicians ranked the specialties as follows: psychiatry, gynecology, pediatrics, dermatology, internal medicine, cardiology, ophthalmology, otorhinolaryngology, and surgery.

Demographic characteristics of the patients (sex, education, etc) are presented in table 2. They had a variety of disorders whose details are beyond the scope of this study. Frequencies of patients' answers to each individual question of the CSQ appear in table 4.

Table 2: Satisfaction rates in percent, based on demographic features of patients referring to medical specialists

Patients	Type	Frequency	Dissatisfied	Satisfied
Gender	Female	366	51%	49%
	Male	189	56%	44%
	Missing	6		
Education	Illiterate	20	55%	45%
	Primary school	63	44%	56%
	High school	264	56%	44%
	Associate level	39	54%	46%
	Bachelor	83	55%	45%
	Master	7	86%	14%
	Ph. D	4	25%	75%
Marital Status	Missing	78		
	Married	317	55%	45%
	Single	171	46%	54%
Economic Status	Missing	72		
	Very good	43	67%	33%
	Good	206	48%	52%
	Satisfactory	237	51%	49%
	Poor	39	56%	44%
	Very poor	16	75%	25%
	Missing	19		

Table 3: Mean satisfaction rate in highest to lowest order from physicians across various fields, manifested by the patients.

Specialty	Dissatisfied	Satisfied
Pediatrics	22% (n=12)	78% (n=40)
Gynecology	29% (n=27)	71% (n=65)
Internal medicine	30% (n=26)	70% (n=66)
Surgery	33% (n=23)	67% (n=47)
Ophthalmology	35% (n=18)	65% (n=35)
Cardiology	37% (n=13)	63% (n=22)
Otorhinolaryngology	38% (n=20)	62% (n=33)
Psychiatry	42% (n=19)	58% (n=29)
Dermatology	46% (n=27)	54% (n=34)
Total Average	34.6% (n=185)	65.4% (n=371)
Missing	4	

Table 4: Frequencies of patients' answers to the items of communication satisfaction questions

No	Questions	Very rarely (1)	Rarely (2)	Some times (3)	Often (4)	Usually (5)	Total	Missing
	Did your physician	% (n)	% (n)	% (n)	% (n)	% (n)	%(n)	%(n)
1	Know (call) your name?	59.7 (335)	11.5 (64)	10.7 (60)	9.8 (56)	6.9 (39)	98.5 (554)	1.3 (7)
2	Introduce himself to you or those with you?	59 (332)	12.9 (72)	12.2 (68)	6.4 (36)	5.9 (33)	96.4 (541)	3.6 (20)
3	Respect your request for having another person with you?	7.9 (43)	7 (39)	19.2 (108)	22.6 (127)	40.6 (227)	97 (554)	3 (17)
4	Arrange for a quiet and tension- free interview?	6 (34)	5 (28)	19.4 (109)	27.3 (153)	40.1 (225)	97.8 (549)	2.2 (12)
5	Help you warm up by using suitable opening remarks?	28.5 (160)	9.3 (52)	28 (157)	18 (101)	15.7 (88)	99.5 (558)	0.5 (3)
6	Encourage you to ask your private questions freely?	8.4 (47)	4.8 (27)	19.4 (109)	27.4 (154)	38.2 (214)	98.2 (551)	1.8 (10)
7	Make sure that the conversation cannot be overheard?	14.1 (79)	4.8 (27)	16.2 (91)	23 (129)	39.2 (220)	97.3 (546)	2.7 (15)
8	Use simple and understandable (intelligible) words to explain his points?	3.8 (21)	4.3 (24)	12.1 (68)	29.4 (165)	29.2 (276)	98.8 (554)	1.2 (7)
9	See you in a suitable clinical situation?	6.8 (38)	4.6 (26)	22.3 (125)	28.7 (161)	37.2 (209)	99.6 (559)	0.4 (2)
10	Use interjections as "uh-huh", "Okay", "well", etc. to encourage and indicate Understanding?	12.2 (67)	6.8 (37)	19.5 (108)	29.9 (172)	30.8 (173)	99.2 (557)	0.8 (4)
11	Make sure the interview won't get interrupted?	21 (118)	11.4 (64)	20.2 (113)	22.8 (128)	23 (129)	98.4 (552)	1.6 (9)
12	Stimulate your verbal production?	8 (45)	3.2 (18)	23.4 (131)	28.3 (159)	35.8 (201)	98.8 (554)	1.2 (7)
13	Help you overcome your worries or anxieties?	4.5 (25)	5.7 (32)	15 (84)	29.8 (168)	43.8 (246)	98.8 (554)	1.2 (7)
14	Spend enough time to talk to you?	9.3 (52)	7.8 (44)	18.7 (105)	24.3 (136)	39.1 (220)	99.2 (557)	0.8 (4)
15	Terminate the interview with suitable concluding remarks as "Bye", "We'll see you again", "No further appointment is needed", etc.?	9.6 (54)	5.4 (30)	16.2 (91)	26.2 (147)	40.6 (228)	98 (550)	2 (11)

The questionnaires completed by patients were 602, of which 41 questionnaires (6%) were precluded due to being incomplete. The analysis was conducted on 561 questionnaires (94% of patients' responses). The results revealed highly significant differences in patient satisfaction across the fields of the study ($P < 0.001$), with satisfaction rates of 65.4% and 34.6% for the satisfied and dissatisfied respectively (table 3). Mean satisfaction rate for each particular specialty, however, did not follow the order predicted in the second hypothesis. That is, physicians in specialties such as pediatrics and gynecology achieved better satisfaction scores ($P < 0.001$) than those in specialties such as psychiatry (table 3). The rank order for patients' satisfaction from nine specialties under study, from the most to the least satisfied, was as follows: Pediatrics, gynecology, internal medicine, surgery, ophthalmology, cardiology, otorhinolaryngology, psychiatry and dermatology.

Discussion

As the results indicate, while gynecology and cardiology manifested similar satisfaction orders for both research-based and impression-based assessments, other specialties revealed significantly different patterns. Unlike the study's claim, psychiatry, for instance, manifested nearly the poorest satisfaction record (i.e. rank 8, of 9) whereas pediatrics scored the first best record (tables 2 and 3).

Some of these differences, regarding satisfaction records across medical fields, have been reported in previous research.^{2,11} Rubin and colleagues,² for example, examined outpatient visits in different practice settings and among a variety of specialties. According to their results, unlike the satisfied, the dissatisfied patients were less likely to refer to the same physician again in the coming weeks or months.

In Roderick and colleagues' study,¹¹ which studied patients' satisfaction with physicians assistants, nurse practitioners, certified nurse midwives, and physicians, orthopedists and gynecologist scored higher than primary care clinicians. In Kaplan and colleagues' study,^{12,13} physicians who scored the highest in encouraging patients to participate in their care retained the greatest number of patients. Conversely, among patients of physicians who were rated in the lowest quartile of participation, one third of patients changed physicians the following year. Higher scores were directly associated with greater patient satisfaction.

Regarding the current study, the question is why the two orders of satisfaction (from the patients' and physicians' view) follow a nearly

reverse pattern. Roderick and colleagues' study,¹¹ attributes gynecologists' (obstetricians') greater success in achieving patient satisfaction to communication and style rather than the type of care provider. We took few steps further to identify other underlying reasons for satisfaction order observed in the current work. This was achieved by raising the issue with many physicians, going through the literature, and reviewing oral comments made by certain patients while completing the questionnaire. The insights obtained from such sources, along with the researchers' speculations about the emerging patterns, turned out to be quite interesting.

As for the pediatricians' most successful record, a likely speculation might be that their patients were mostly too young to directly get involved in filling out the questionnaires. Instead, in many occasions, a close relative (i.e. the father, mother, or another relative) accompanying the child to the outpatient clinic completed the questionnaires on their behalf. Therefore, in completing the questionnaires, the relatives, serving as informants, might have unintentionally been affected by their personal perceptions of the clinical encounters rather than the actual views of the children. Attitudes of an informant relative may not fully corroborate those of the patient.

Another speculation might be that children are normally taken to outpatient clinics for reasons different from those of adult patients, because the types of discomforts at early ages are different from those at adulthood or late adulthood. Moreover, due to common parental and social attention at this age, children are generally more positive toward their surroundings including outpatient clinics rather than adults.

The gynecologists' achievement in patient satisfaction is thought to be gender related. To investigate this assumption, the data as a whole were analyzed for sex-related differences. Regarding the physicians, the results showed that female doctors were more successful than their male counterparts ($P < 0.002$) in achieving patient satisfaction. Interestingly, a similar pattern emerged from female patients, although the difference was not statistically significant. Such results are of special importance particularly in that the patients referring to gynecologists including those who completed the questionnaires were exclusively females.

Internists' third position may be explained by the varieties of patients that are usually visited by them. Their patients are not similar to pediatric patients who may refer to their physicians just for routine check-ups. Nor are they similar to the gloomy patients of the psychiatrists. Their

patients are normally with a variety of ailments from diverse age groups of both sexes. Such patients are more likely to achieve a close-to-the middle rank, on the satisfaction spectrum, as manifested in this study.

Unlike the study's initial claim, surgeons performed much better than predicted. Their rank (4 of 9) is much better than initially conceived, indicating that classifications of this sort, i.e. manual versus psychological, may be too crude to account for complexities involved in social interactions such as clinical interviews.

The results on psychiatric field may yet be the most interesting. Unlike the study's hypothesis that envisaged the best satisfaction record for psychiatrists, their patients proved the opposite by spotting the second lower position on the satisfaction spectrum. To find out more about factors likely to underlie psychiatrists' low record, the issue was taken to a few psychiatrists, while the relevant literature on this particular issue was also reviewed once more.^{3,9,13} The implication drawn was that doctor-patient communication similar to other social interactions is far more complex than could be formulated as statements shaped based on common knowledge. Indeed a variety of factors are left unattended. Among numerous factors not studied in the present study, some are more specific to psychiatric patients. Those include the multifactorial nature of psychiatric diseases, lack of auxiliary follow-ups with social workers in Iran that is an essential requirement for post-clinic therapy, insufficient number of work therapists or consultants in many cities in Iran, the chronic nature of mental diseases involving long-term treatment that could entail their own complications, and the non-tangible nature of psychological treatment. All these may indicate that patients seeking psychiatric care are likely to exert very different characteristics, compared with those referring to other specialties such as pediatrics or gynecology. Hence, given that the factors enumerated above might imply a psychiatric patient's tendency to rate physicians of all kinds lower in general, the type of patient can largely be the reason for different ratings manifested rather than the skill of the physician.

Like many similar studies, the current work had its own limitations that caution generalizations particularly beyond Iran. A noticeable point relates to the varieties involved in type of patients and the nature of their discomforts. For example, patients with gynecologic diseases referring to gynecologists are different from those with mental illnesses referring to psychiatrists. Of course, due measures were adopted in order not to let such factors bias the

results. For example, we excluded those with acute mental disorders. Nonetheless, the problem still remains that psychiatric patients may tend to rate physicians of all kinds lower. Another problem is that some patients may not pay adequate care in rating their satisfaction from their physicians, although the researchers in this study did their best to remind the subjects the significance of reflecting true answers. Another limitation might be that our satisfaction measures primarily concerned with physician-patient factors and might have missed additional dimensions of satisfaction. These additional dimensions may include convenience of the appointment, waiting room, and parking space. One more limitation may be the nature of the questions, i.e. being closed and leading questions. Such questions allow only a brief answer. For example, having overlooked the five-point scale of the questionnaire, few patients precluded from the present study had provided a brief "yes" or "no" answer. A leading question is more likely to guide the respondents toward such answers while an open, non-leading, question provides a free option. This is not to downgrade the significance of leading questions as sometimes the interviewer must ask leading questions, as in our case, in order to check important points. Patients' attitudes toward the non-verbal communication with meaningful cues to guide the interview were not assessed in this study. By adopting such cues to encourage the patient to speak more, for example, leaning forward to attend more closely, or nodding to indicate that a point has been noted, the physician can convey a positive impression, resulting in better satisfaction record.

Conclusion

Features including the psychiatric patients' tendency to rate lower the physicians of all kind might indicate the complexity of factors accounting for patients' attitude toward clinical interactions. Differences in communication skills among different specialties may play a role, however these differences may not justify the entire differences. A variety of issues including the type of patient discomfort, physician or patient sex or auxiliary facilities for post clinic follow-ups that were discussed above, may interact to shape patients' attitudes toward clinical encounters. The identification of such factors could help to develop more effective training courses on interaction skills for different medical groups, resulting in more satisfactory physician-patient clinical interactions.

Conflict of Interest: None declared

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