# Dermatologists Communication Skills and Performance From Point of View of Patients

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#### **ABSTRACT**

**Introduction:** Effective communication is an important issue in patient-doctor interaction which is even more important regarding chronic disorders which need a strong relationship between patient and clinician for better compliance and optimal control disease.

**Objectives:** This study was aimed to develop the best cultural adapted Persian version of the 28-item Calgary- Cambridge Observation Guide (CCOG) questionnaire.

**Methods:** In this descriptive-analytic study, data collected from 400 patients attending the outpatient dermatology clinics of 3 major hospitals in Tehran using the modified Persian version of CCOG questionnaire, both before and after being visited by dermatologists.

**Results:** The difference of CCG scores for all of questions, except for questions number 1,16 and 22, was statistically significant. The highest score, both before and after visiting, attained by question regarding being respectful. The lowest scores for necessary behavior and the adequate amount of ex-

ecution were related to questions number 3 (Introducing self) and 4 (Introducing role), respectively. Age and educational level of patients were significantly correlated with their expectations regarding communication skills of clinician.

**Conclusions:** This study showed the acceptable validity of modified Persian version of CCOG-24 item questionnaire. Our findings also demonstrated that there was a significant difference between what patients expected from a dermatologist and the manner they actually were treated regarding physician communication skills.

#### Introduction

Effective communication is an important issue in patient-doctor interaction and has been proved to be associated with positive health-related outcomes [1-4]. Hence, finding the appropriate tools to assess communication skills in medical staffs, seems to be essential and also challenging. Mostly, some checklists for performance comparison and feedback are used [5]. One of the most useful checklists in this regard is Calgary- Cambridge Observation Guide (CCOG) which is a 28-item questionnaire derived from Calgary- Cambridge Process Guides and consists of six blocks/domains with a 3-point scale (yes/ yes, but and no) and has been previously shown to have adequate psychometric properties [5].

Since many of dermatologic disorders are chronic conditions which need a long-lasting patient-doctor interaction, effective communication is essential to provide a better patient's compliance and adherence to treatment which is an even more important issue for optimal control of chronic disorders.

## **Objectives**

This study was aimed to develop a Persian version of the 28-item CCOG questionnaire and try to reach the best cross-cultural adapted form of it to assess medical communication skills in dermatology clinics via a validated Persian questionnaire.

#### Methods

We conducted this study based on previous recommendations [6] via the following stages: translation, review by a committee of specialists and pretesting for assessing its validity.

Initially, two bilingual translators provided two Persian versions of the questionnaire, independently. These forms were sent to an expert committee consisting of five associated professors of dermatology to check its reliability. They checked the contents, provided some changes and suggestions and tried to merge two forms into a complete, final version, ready for pre-testing.

After reaching a consensus, the final version was applied to 15 patients coming to the Razi dermatology Hospital, affiliated to Tehran University of Medical Sciences (TUMS). The patients visited a dermatologist at a baseline visit and two weeks later and were asked to fill out the questionnaire. All doubts and concerns regarding the questionnaire were discussed and patients were guided through the process in case they encountered any difficulty. The translated form of questionnaire is available in the appendix. The statistical analysis was performed using SPSS, version 20. We estimated the Cronbach's alpha coefficient and the spearman correlation coefficient to assess the internal consistency of each domain and the correlation between the domains.

After confirming the validity of questionnaire, it was filled out by 400 patients attending the outpatient dermatology clinics of 3 major hospitals in Tehran (Razi hospital, Rasoul-e-akram hospital and Shohadaye tajrish hospital).

For questions regarding necessity of performing a behavior by clinician, the answers were scored as follows: Below (1), at (2) or above (3) the expected level. About the adequate amount of implementing that behavior by clinician, the answers were again scored as follows: No (0), Somehow (1) and Yes (2). Then, sum of the scores per each question was calculated and final scores for each question was calculated using this formula: sum of scores × 100/800

Inferential statistics were performed using paired t-test, Chi-Square and Mann-Whitney tests, where appropriate. A significant P value was considered less than 0.05.

#### Results

Based on Spearman ratio and Cronbach Alfa of 0.838 (95% CI: 0.82 -0.86), the translated questionnaire was proved to be valid (data was not shown).

Demographic and socioeconomic characteristics of participants are shown in Table 1.

The participants were mainly female (67% versus 33%) with a mean age of  $37.5 \pm 5.6$  years, ranged from 12 to 73 years.

Table 2 shows CCGS before and after a dermatology visit. As shown above, the difference of CCG scores for all of questions, except for questions number 1,16 and 22, was statistically significant.

**Table 1.** Demographic and socioeconomic characteristics of participants.

		Number	%
Hospital	Razi	300	75
	Shohadaye Tajrish	60	15
	Rasoule Akram	40	10
Gender	Male	132	33
	Female	268	67
Education level	Under diploma	77	19
	Diploma	121	30
	Associate	35	9
	Bachelor	103	26
	Master or above	64	16
Occupation	Employee	123	30.8
	Self-employed	96	24
	Worker	7	1.8
	Housewife	115	28.8
	Collegian	35	8.8
	student	24	6
Residential area	Tehran	310	77.5
	Other cities	85	21.3
	Rural area	5	1.3
Reason of attendance	Dermatologic disease	299	74.8
	Cosmetic problems	42	10.5
	both	59	14.8
Number of attendance	First visit	141	35.3
	Second visit or more	259	64.7

**Table 2.** Mean CCG scores before (necessity of execution of behavior) and after (the actual amount of execution of behavior) visiting by dermatologist.

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N	Question	Mean necessity of execution	Mean actual amount	Effect size	P value					
1	Greeting patient	1.51	1.55	0.094	0.061					
2	Asking patient name	1.10	0.97	0.11	0.028					
3	Introducing self	1.07	0.63	0.38	<0.001					
4	Introducing role	1.29	0.45	0.69	<0.001					
5	Behave patient respectfully	1.91	1.59	0.16	0.002					
6	Encourage patient to tell the problem	1.86	1.84	0.4	<0.001					
7	Does not interrupt or direct patient statements	1.89	1.55	0.33	<0.001					
8	Uses understandable questions without any professional vocabulary	1.79	1.67	0.24	<0.001					
9	Establishes dates and sequence of events	1.79	1.67	0.13	0.001					
10	Exploring patient worries regarding problems discussed	1.60	1.07	0.52	<0.001					
11	Encourage patient to express feelings	1.34	0.83	0.45	<0.001					
12	Pays enough attention to patient behaviors	1.72	1.37	0.38	<0.001					
13	Makes a note of important issues	1.54	1.40	0.13	0.011					
14	Appropriate time management of interview	1.74	1.50	0.26	<0.001					
15	Appropriate coping with patient	1.57	1.16	0.41	<0.001					

Table2 continues

**Table 2.** Mean CCG scores before (necessity of execution of behavior) and after (the actual amount of execution of behavior) visiting by dermatologist. (continued)

N	Question	Mean necessity of execution	Mean actual amount	Effect size	P value
16	Appropriate self-confidence	1.842	1.79	0.08	0.081
17	Present complete and appropriate data	1.91	1.67	0.36	<0.001
18	Repeats medical advice in order to help to a better understanding by patient	1.57	1.067	0.39	<0.001
19	Shares decision making process with patient	1.58	1.24	0.33	<0.001
20	Final check if patient has any question or other items to discuss	1.54	0.93	0.54	<0.001
21	Summarizes patient information at the end of visit	1.51	0.90	0.55	<0.001
22	Scheduling for next visit	1.77	1.56	0.094	0.061

The highest score both before and after a visit was attained by question number 5 which was about being respectful (92% and 85%, respectively).

The lowest scores for necessary behavior and the adequate amount of execution were related to questions number 3 (Introducing self) and 4 (Introducing role), respectively (Table 2).

Based on our results, questions number 5 and 7 were noted to be more important for patients and items number 6 and 16 were the most executed behavior by dermatologists (Table 2).

Several subgroup analyses were performed to peruse the correlation of various characteristics of participants with GCC scores. The results showed that age and educational level of patients were significantly correlated with their expectations regarding communication skills of clinician, as follows:

The answers to questions number 1,2,3,4,11,13,15 and 21 were correlated to age of participants (P values: 0.04, 0.032, 0.016, <0.001, 0.001, 0.004, 0.04 and 0.013, respectively).

Educational level of subjects affected the response to questions number 7,11,12,14,15,18,19,21 and 22 (P values: 0.045, 0.023, <0.001, 0.006, 0.008, 0.025. 0.037, <0.001 and 0.001, respectively).

Regarding adequate execution of skills by clinicians, educational level of patients was the only factor that affected their opinions: answers to the questions number 5,8,9,14,16,17 and18 were significantly correlated with educational level of patients (P values: 0.036, 0.010, 0.022, 0.001, 0.009, 0.002 and 0.019, respectively).

#### **Conclusions**

The reliability coefficient of questionnaire was 0.84 in our study which was in the acceptable range of 0.8 to 0.9 [7]. Hence, this study showed the acceptable validity of modified Persian version of CCOG-24 item questionnaire.

Our findings demonstrated that there was a significant difference between what patients expected from a dermatologist and the manner they actually were treated regarding physician communication skills evaluated by the CCG questionnaire.

Overall, mean general score for necessitation of communication skills was 81% and the most important issues in this regard were "being respectful" and "presenting complete and adequate data". Contrary, "introducing self and role" was considered the least important item by patients.

These results are in line with Afkham et al study in which the main priority of patients was acquisition of adequate and complete data [8]. Athari et al showed the importance of being respectful in a review published in 2010 which is congruent with our results [9].

From the point of view of our patients, criteria regarding "gathering information" and "initiating the session" were the most and the least important items, respectively. These findings are against the results of previous studies conducted in some Western countries in which initiation of the session and introducing the clinician seems to be very important for patients [3]. This discrepancy in results could be explained by cultural differences. In fact, Iranian patients do not expect the clinician to introduce her/his self or encourage them to express their feelings. Hence, culture building in this regard seems to be necessary among Iranian patients.

We found that older patients compared to young ones emphasized more on the necessity of communication skills, especially regarding criteria related to initiating the session and understanding the patient's perspective. This indicates the significance of implementing these skills of older people.

The study also highlighted the relationship between educational level and some GCG criteria including "understanding the patient perspective"," building relationship" and "closing the session". In fact, patients with higher educational level were more likely to be understood by physician and have a summary at the end of the session.

The mean score for executing the communication skills by clinicians was 65%. The highest and lowest scores in this regard were attained by "being respectful" and "introducing role" (92% and 23%, respectively).

The rate of patient satisfaction among whom attending to outpatient dermatology clinic was shown to be 60% in previous studies [10] which is somehow similar to our results regarding communication skills.

Finally, we found that our dermatologists were relatively weaker on criteria related to initiating the session, coping with patients and caring for their feelings which mandates future changes in their educational curriculum in this regard. However, other potential reasons could be a higher number of patients in clinics of educational hospitals and the absence of enough time for visiting patients as well as a relatively higher workload and exhaustion of physicians in this setting.

This study had some limitations: firstly, illiterate patients could not participate in the study and secondly, the questionnaire was only about physicians, but other medical staffs might be as important as clinicians and might lead to patient's dissatisfaction as well.

Future studies for evaluating the behavior of other medical staffs are needed to enhance the satisfaction level of patients.

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