

Original Article

Confidence and Use of Communication Skills in Medical Students

Mahnaz Jalalvandi¹, Akhtar Jamali¹, Ali Taghipoor-Zahir¹, Mohammad-Reza Sohrabi^{2*}

¹ Department of Educational Management, Science and Research Branch, Islamic Azad University, Tehran, Iran

² Department of Health and Community Medicine, Social Determinants of Health Research Center, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Abstract

Background: Well-designed interventions can improve the communication skills of physicians. Since the understanding of the current situation is essential for designing effective interventions, this study was performed to determine medical interns' confidence and use of communication skills.

Materials and Methods: This descriptive-analytical study was performed in spring 2013 within 3 branches of Islamic Azad University (Tehran, Mashhad, and Yazd), on 327 randomly selected interns. Data gathering instrument was a questionnaire with 14 items for confidence and 17 items for use of communication skills. Data analysis was performed using descriptive statistics as well as Spearman and Mann-Whitney U tests.

Results: Students' confidence and use of communication skills was evaluated moderate. There was a significant positive correlation between students' confidence and use of communication skills ($r=0.42$, $p=0.001$). Male students reported higher scores for confidence and use of communication skills compared to female, but this was not significant ($p=0.055$ and $p=0.292$, respectively).

Conclusion: Considering significant correlation between confidence and use of communication skills, designing educational interventions is recommended for development of confidence and resulting use of communication skills in medical students.

Keywords: confidence, communication skills, medical students

***Corresponding Author:** Mohammad-Reza Sohrabi. Department of Health and Community Medicine, Social Determinants of Health Research Center, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Email: m.sohrabi@sbmu.ac.ir.

Please cite this article as: Jalalvandi M, Jamali A, Taghipoor-Zahir A, Sohrabi MR. Confidence and Use of Communication Skills in Medical Students. *Novel Biomed* 2014;2(2):53-58.

Introduction

It has been well documented that the doctor-patient relationship is central to the delivery of high quality medical care. It has been shown to affect patient satisfaction, to decrease the use of pain killer, to shorten hospital stays, to improve recovery from surgery¹, to increase patient recall and understanding, symptom resolution, and significant reduction in malpractice claims², to increase adherence recommended treatment³, and trust in doctors^{4,5}. Changes in society and health care have resulted in real changes in what people expect from their doctors. Many patients ask for more

information and also want to participate in decision making processes of their disease. They need to know about their treatment options and side effects⁶. However, several studies indicate that physician-patient relationship is not desirable^{3,7-9}.

Communication skills training could affect significantly knowledge and attitudes of physicians and patient satisfaction¹⁰. Training of communication skills is based on this theory considerate of related concepts of professional communication make the training process more easier. Although knowledge alone is insufficient for actual behavior changes, theoretical knowledge may help the students to achieve their training goals¹¹.

Despite the importance of communication skills training, we have not addressed these issues adequately and knowledge improves if we have an assessment of physicians' confidence in using specific communication skills and actual use of them in their encounters with patients. Thus, the purpose of this study was to determine medical interns confidence and use of communication skills at Islamic Azad University.

Methods

The present study was a descriptive analytical study which was carried out in 2013 at Islamic Azad University. Among the 10 Islamic Azad University branches that have a medical degree, three branches (Tehran, Mashhad, and Yazd) were selected randomly. The total number of interns in the selected branches was 425. Four hundred interns received the self-administered questionnaire.

The study questionnaire included three sections: demographics and two sections of the questionnaire were developed by Ashbury et al. in 2001: "confidence in using" and "actual use of communication skills"¹². In current study, we created some modification in Ashbury questionnaire. "trust-development" item was added to confidence section, and four items of "closing the encounter" section were added to "use of communication skills".

The respondents completed the questions by selecting the response option that most accurately reflects their answer to the question. In confidence section, respondents could select among four options: "confident: I don't really need to improve" (scored 3); "confident: but believe I need to improve" (scored 2); "not very confident: believe I need to improve" (scored 1); "not very confident: not a priority to improve" (scored 0). In "use of communication skills" section, respondents were asked to estimate the percentage of their adult patients with whom the respondents used different communication skills (0-20%, 21-40%, 41-60%, 61-80%, 81-100%, respectively scored 0 to 4).

Content validity of instrument was confirmed by 10 experts in medical education and communication skills training. A pilot study was conducted to investigate the face validity and improvements. Cronbach's alpha

coefficients were calculated to assess the reliability of questionnaire. Calculated alpha was 0.93 for confidence and 0.89 for use of communication skills. Questionnaires were distributed to interns and after completing were collected. The survey data were analyzed using the SPSS software version 11.5.

Results

It was received 335 completed questionnaires from interns. Eight were eliminated due to various non-completed items, so that 327 questionnaires were analyzed (response rate calculated as 82%). The respondents were predominantly male (55%) and their average age was 27.5 (± 2.6) years. Number of participants in Tehran, Yazd and Mashhad branches was respectively 149 (46%), 77 (23%) and 101 (31%).

As a measure of self-efficacy (confidence), respondents were asked to comment on their confidence to use various communication skills during encounters. The results are shown in table 1. More than half of respondents indicated they were confident in use of all 14 identified communication skills (score 2 and 3). The highest percentages were respectively "trust-development" (61.2%), "explaining treatment options" (59.3%), and "expressing your concerns and preference about possible treatment options" (58.4%). Less than one third of interns indicated they were confident in and didn't need to improve their use of all communication skills. The highest percentage was "trust development" (24.5%) and the lowest percentage was "explaining treatment options" (11.5%).

As a measure of actual use of communication skills, interns were asked to estimate the frequency with which they used specific communication skills with the adult patients they saw in the previous month. The results are shown in table 2. All skills were reported as having been used with more than 60% of patients they saw during the previous month. They used these two strategies more: "addressing patients in a polite, warm and friendly manner" (62%), and "determining the psychological, emotional and social needs of patients" (60%). The strategies they less frequently used were: "summarizing what occurred during the encounter" (37%) and "reviewing the treatment plan with patients" (39.2%).

Table 1: Interns Confidence with Communication Strategies (Percent, n=327)

Communication Strategy	Confident: I don't really need to improve	Confident: but believe I need to improve	Not very confident: I need to improve	Not very confident: not a priority to improve
Explaining treatment options to your patient in a manner that ensures a high level of understanding by your patient	11.3	48	30.6	10.1
Helping your patient cope with her or his worries by explaining the current medical problem to her/him in a manner that facilitates coping	15.9	35.8	39.4	8.9
Explaining the possible benefits and risks to your patient of the recommended tests, procedures and treatment options (including medications)	14.4	37.6	36.7	11.3
Offering your patient specific advice about options available to resolve a common health problem	18.7	35.5	37	8.9
Conveying empathy to your patient regarding her/his problem	19.9	32.7	36.7	10.7
Identifying and pursuing verbal cues given by your patient	18.3	39.4	34.3	8
Identifying and pursuing non-verbal cues given by your patient	20.2	35.8	36.4	7.6
Communicating effectively with your patient even though you find her/him to be rather difficult	18	34.9	36.7	10.4
Actively involving your patient in the process of making treatment-related decisions	18	35.2	33.6	13.1
Expressing your concerns and preferences about possible treatment options to your patient	20.2	38.2	30.6	11
Discussing alternative or complementary therapies with your patient	15.9	40.1	34.9	9.2
Securing your patient's commitment to trying to follow the treatment plan that you developed with your patient	18	36.4	43.3	11.3
Using the last few minutes of the encounter to summarize the important issues discussed during the encounter	19	37	32.7	11.3
Developing trust	24.5	36.7	32.4	6.4

Relationship between confidence and use of communication skills were assessed using Spearman's test. A significant positive correlation was found ($r=0.42$, $p=0.001$). Males and females means in confidence and use of communication skills were compared using Mann-Whitney U test. The results showed that although male interns had higher score accounted for both sections, but this difference was not statistically significant. The results are shown in table 3.

Discussion

This study aimed to investigate the relationship between confidence and use of communication skills in interns. The results showed a positive significant correlation between these components. This result is consistent with

the results of Watson et al. where increased level of confidence for a particular procedure were found, which translated into an increased use of the procedure¹³. Clark et al. found that when students have a higher sense of confidence about their skills, they are more likely to think of these skills as important, which may indirectly affect competence¹⁴. Also, Bradbury-Jones et al. found that increased confidence was related to improved motivation for learning and a better outlook on a situation¹⁵. Mann found the relationship between increased level of confidence and increased motivation to practice the skills that students have learned¹⁶. Researchers such as Morgan and Wayne have pointed to the lack of a direct relationship between confidence and competence^{17,18}. The results of current study showed that students' self-efficacy in communication skills were not very desirable.

Table 2: Use of Communication Strategies (Percent, n=327)

Communication Strategy	20% or less	21- 40%	41- 60%	61- 80%	81- 100%
Addressed your patients in a polite, warm and friendly manner.	6.7	7	24.2	40.4	21.7
Used open-ended questions that encouraged your patients to discuss their problem	1.8	10.1	36.7	33.6	17.7
Facilitated your patients expressing their feelings	2.4	8.6	34.6	37.6	16.8
Actively encouraged your patients to express their feelings about their current problem.	2.8	7.6	36.4	34.9	18.3
Actively expressed your understanding and empathy for your patients' problems.	2.8	7	34.9	35.5	19.9
Responded to your patients in a supportive manner when they expressed their feelings.	3.1	6.1	34.3	34.9	21.7
Tried to determine the psychological, emotional and social needs of your patients.	1.8	7.3	31.2	40.7	19
Tried to educate your patients about their health problems and their etiology.	1.8	9.5	35.5	35.8	17.4
Tried to educate and then determined if your patients had a reasonably good understanding about the possible treatment options.	1.5	10.4	32.4	37.6	18
Addressed your patients' questions at the level of detail that seemed appropriate	2.8	7.6	31.8	35.8	22
Actively involved your patients in the process of developing treatment plans.	2.4	10.1	33.9	35.2	18.3
Once a treatment plan was developed, you tried to get your patients' commitment to try to follow the treatment plan	3.1	9.5	34.9	30.3	22.3
Actively engaged your patients throughout the encounters	9.2	12.2	33.6	35.5	9.5
Summarize what occurred during the encounter.	6.4	11.9	44.3	28.1	9.2
Ask your patient if she/he understood the nature of the problem and the components of the treatment plan.	6.4	12.2	41.9	30.3	9.2
Review the treatment plan with your patient	6.1	12.8	41.9	30	9.2
Clarify the next steps with your patient to ensure he/she will implement the treatment plan appropriately	15.6	11.3	32.1	28.7	12.2

Table 3: Comparing means of confidence and use of communication skills in male and female interns

	Mean (SD) of male	Mean (SD) of female	Z value	P value
Confidence	1.69 (0.63)	1.57 (0.65)	1.921	0.055
Use of communication skills	2.53 (0.56)	2.48 (0.67)	1.053	0.292

In all communication skills, most students felt they need to improve their skills. This is not consistent with the results of Ashbury. In that study, most participants had self-efficacy in most communication skills¹². This suggests that confidence building should be considered in future communication training for medical students. Students were also asked to estimate the frequency with which they used communication skills through their encounters. Results showed that about half of students have used communication skills in more than 60 percent of encounters. This result is consistent with other studies in Iran. Anbari reported that communication

performance of interns before communication skills training was moderate¹⁹. Farajzadeh studied relationship between interns and patients from observers and patients views and reported moderate scores²⁰. Weakness in confidence and use of communication skills in interns may be related to their communication skills knowledge deficit which indicated in several studies. For example Tavakol reported that interns had a limited knowledge of communication skills¹.

Several studies indicate that communication with patients is not desirable not only in interns, but also in graduate physicians. Most of patients mentioned that their

physicians don't care about their problems; they don't pay attention to them and let them to know more about the disease³. In other study, 87 percent of patients responded that the time for communication between physicians and patients was not enough⁷. Results of a study by Bensing showed that contrary to expectations, in 2002, patients were less active, talking less, asking fewer questions and showing less concerns or worries, and GPs were less involved in partnership building than sixteen years earlier⁸. Karami has reported that the mutual participation model applied by physicians less than other models of physician-patient relationship⁹. Despite this, results of Ashbury indicated higher frequency of using communication skills by respondents. This may be related to participants of that study which were family physicians¹².

In addition, our results indicated that frequency of each of the communication skills were different. This suggests requirement of careful need assessment before designing any education intervention.

The findings of this study must be interpreted in light of its limitations. The confidence and using communication skills data are self-reported by respondents. This approach is the most appropriate method for collecting the confidence data, but an observational method is a more rigorous procedure for collecting data on actual use of communication skills. It seems reasonable to assume the behavioral data over estimate the actual use of the communication skills.

Discussion

Interns recognize the importance of good communication skills, but require training to ensure effective delivery. Because of positive significant relationship between interns confidence actual use of communication skills, there is an urgent need for coordinated approaches to facilitate communication skills training at the undergraduate levels, to improve both of them.

References

1. Tavakol M, Torabi S, Lyne OD, Zeinaloo AA. A quantitative survey of interns' knowledge of communication skills: An Iranian exploration.

BMC Medical Education. 2005;5:6.

2. Williams S, Sa B, Nunes P, Stevenson K. Communicating with first year medical students to improve communication skills teaching in the University of West India. *Int. J. Medical Education*. 2010;1:5-9.

3. Levinson W, Lesser CS, Epstein RM. Developing physician communication skills for patient-centered care. *Health Affairs*. 2010;29(7):1310-18.

4. Singh Gaur S, Xu Y, Quazi A, Nandi. Relational impact of service providers' interaction behavior in health care. *Managing Service Quality*. 2011;21(1):67-87

5. Ommen O, Thuem S, Pfaf H, Janssen Ch. The relationship between social support, shared decision- making and Patient's trust in doctors: A cross sectional survey of 2197 inpatients using the Cologne Patient Questionnaire. *Int. J. Public Health*. 2011;56(3):319-27.

6. Gask L, Usherwood T. ABC of psychological medicine, the consultation. *BMJ*. 2002;324:1567-69

7. Alhashem AM, Alquraini H, Chowddury RI. Factors influencing patient satisfaction in primary healthcare clinics in Kuwait. *International Journal of Health Care Quality Assurance*. 2011;24(3):249- 62

8. Bensing JM, Tromp F, Dulmen S, Brink-Muinen A, Verheul W, Schellevis FG. Shifts in doctor-patient communication between 1986 and 2002: a study of videotaped General Practice consultations with hypertension patients. *BMC Family Practice*. 2006;7:62.

9. Karami Z, Keyvanara M. Models of Relationship between Physicians and Patients Referring to the Clinic of Isfahan Shahid Beheshti Hospital, 2007. *SDME*. 2010;6(2):149-56. [Persian]

10. Managheb E, Zamani A, Shams B, Farajzadegan Z. The Effect of communication Skills Training through Video Feedback Method on Interns' Clinical Competency. *Iranian Journal of Medical Education* 2010; 10(2): 164-169. [Persian]

11. Baerheim A, Hjortdahl P, Holer A, and et al. Curriculum factors influencing knowledge of communication skills among medical students. *BMC Medical Education*. 2007;7:35-40

12. Ashbury FD, Iverson DC, Kralj B. Physician communication skills: Results of a survey of general/family practitioners in Newfoundland. *Med Educ Online* [serial online]. 2001; 6:1. [cited 2013 Dec 18]. available from URL <http://www.med-ed-online.org>

13. Watson P, Hamilton L, Simpson K, Riley N Lillicrap M. Teaching knee joint aspiration to medical students— an effective training with long-term benefits. *Clinical Rheumatology*.2010;29:921-5

14. Clark MC, Owen SV, Tholcken MA. Measuring student perceptions of clinical Competence. *Journal of Nursing Education*. 2004;43(12):548-54.

15. Bradbury-Jones C, Sambrook S, Irvine F. The meaning of empowerment for nursing students: a critical incident study. *Journal of Advanced Nursing*. 2007;59(4):342-51.

16. Mann KV. Motivation in medical education: how theory can inform our practice. *Academic Medicine*. 1999;74(3):237-9.

17. Morgan PJ, Cleave-Hogg D. Comparison between medical students' experience, confidence and competence. *Medical Education*. 2002;36:534-9.

18. Wayne D, Butter J, Siddall V, Fudala M, Wade L, Feinglass J, McGaghie W. Graduating internal medicine residents' self-assessment and performance of advanced cardiac life support skills. *Medical Teacher*.2006;28(4):365-9.

19. . Anbari Z, Godarzi D, Siros A, Mahdian F. Design, implementing &

evaluation of an educational program on improving the communication skills with patients based on WHO in interns. Iranian Journal of Medical Education. 2012;12(5):308-16. [Persian]

20. Farajzadeh S, Noohi E, Mortazavi H. Interns' Communication with Patients during Interview: the Perspectives of Patient and Observer. Iranian Journal of Medical Education. 2006;6(2):79-85. [Persian].