Pharmacy Students' Perception of Communication Skills in Health Sciences Practices Course

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Abstract

Employing effective oral communication skills is one of the major concerns of accurate and healthier interactions in various health environments. When it comes to Turkey, it is still relatively one of the new concepts to be focused on by healthcare providers, specifically to the field of clinical pharmacy. To build effective communicative skills further in the academic and professional field, eighty two third-year pharmacy students at Istanbul Kemerburgaz University, Turkey participated in Oral Communication Skills in Health Sciences Practices Course which was adapted from an existing course run by the Skaggs School of Pharmacy, University of Colorado. The students practiced case-based scenarios, class role plays and interviews in the frame of patient centered care approach through the course delivered in 2015 and 2016 spring terms. This study aims to show the students' perception regarding this course with the results of a pretest and posttest subsequent to a semi-structured interview for student evaluation. Expectedly, the results of the student questionnaires (n=59) indicated both group of students rated the course higher compared to their initial views; providing them new perspectives in patient centered care, introducing new terminology and increasing their career prospects whereas the results were not favorable for their advancement of oral communication skills "in English" and practicing their skills in the profession in international settings.

Keywords: Student perception, Communication skills, Patient centered care, Clinical pharmacy

Introduction

Employing effective oral communication skills in health sciences has been given much attention as one of the major concerns of more accurate and healthier interactions in various health environments. Within these environments, as being the core component of "healthcare provider" – "communication" – "patient" cycle, the pharmacist's role has shifted from the authoritative to a more observant as well as being empathic, collaborative, harmonious and informational (Epstein & Street, 2011). Apparently, it is one of the major issues to be focused on by all healthcare providers, specifically in the field of pharmacy. It is the pharmacist; the professional enables the effective communication in the numerous interactions with patients mainly in clinical settings, and other healthcare environments.

In the concept of patient-centered communication, it is emphasized that foundation of the pharmacist – patient collaboration is vital for the both parties in the patient care process. An effective, integrated care is the outcome if an ongoing communication and cooperation is kept with health care professionals, pharmacists and physicians. ("Pharmacists Patient Care Process", 2014) Pharmacists' communication with patients can be best achieved through improving their active listening skills, ability to display empathy and certain degree of professionalism, building rapport with the patient, and being aware of the ethnical diversities. Furthermore, pharmacists and their staffs must acknowledge the value of interpersonal communication as an essential element in building trust between patients and the pharmacy community (Beardsley, Kimberlin & Tindall, 2007). Therefore, the improvement of prospective pharmacy students' communication skills for clinical settings through convenient training and education is apparent (McDonough & Bennett, 2006).

Oral Communication Skills in Health Sciences Practices Course

Through the collaboration of the University of Colorado (UC) and Istanbul Kemerburgaz University (IKBU), the course titled "Oral Communication in Health Sciences Practices" was adapted from an existing course at Skaggs School of Pharmacy, UC and it was taught to third-year Pharmacy students in two consecutive spring terms in 2015 and 2016 Academic Years. An inter-organizational and interdisciplinary approach between Istanbul Kemerburgaz University (IKBU)'s Faculty of Pharmacy and the School of Foreign Languages cooperation was needed to run the course due to the nature of a communication skills course; (1) primarily its being in English language and (2) the requirement for the use and instruction of effective various linguistic functions as the framework for mainly Indian Health Services (IHS) and other highlighted communication patterns.

The implementation of the course raised the question about the students' perceptions of their improvement of communication skills in patient-centered care, which is the core component of pharmaceutical care; relatively a new concept in clinical pharmacy settings in Turkey (Sancar, Okuyan, Apikoğlu, & İzzettin, 2013).

A general comparison of the outcomes of the assessments along with the students' perceptions of the oral communication skills course given may help visualize these prospective pharmacists' approach and attitude towards multifaceted and multicultural, and therefore, complex interactions with their patients and other health care providers by using English language in constantly changing, ambiguous health-related settings.

Methods

This study was conducted by using both qualitative and quantitative methods for two different groups of third-year pharmacy students attending the course titled "Oral Communication in Health Sciences Practices". The participation and attendance to the course was obligatory for both groups. The total first group comprised 7 males and 22 females and the second group comprised 26 males and 23 females; 78 students with a mean age of 21.9.

A 30-hour & 10 week course contained 2 lesson hours of input on the patient-centered communication and 1 hour of oral practice session with various case scenarios. In these sessions, students actively employed verbal and non-verbal communicative skills through specific practices; taking medical history, prescription counseling, self-care product counseling, and motivational counseling. The input sessions were delivered by using active learning strategies and oral practice sessions which included case discussions, role-plays followed by pair and group assessments.

The students' communication skills were evaluated through 2 oral mid-term exams along with a written part for each and 3 separate communication assessments. The in-class oral practice sessions which included frequent reinforcement of input on the five communicative competence components: linguistic, strategic, sociocultural, actional and discourse were followed up after presentations of each main topic (Celce, Dérnyei, & Thurrell, 1995). In these sessions, the students were continuously introduced subjects in relation to the patient-centered communication. They both studied and practiced the cases containing various interactions between patients, healthcare providers and pharmacists. The students were provided with continuous feedback before and after their role-play performances in the group and/or pair work activities.

The trained 78 students were handed a 48 item evaluation survey at the beginning and at the end of the course to collect data for this study. The survey consisted of four major parts; (1) Demographics, (2) Language & Course, (3) Expectations & Outcomes, and (4) Comments. A 5 point Likert-scale (1=strongly disagree to 5=strongly agree) was used for the questions asked in pre and post surveys which were both the same in structure and content. The Cronbach Alpha value was calculated for the reliability of (2) Expectations and Outcomes part from which the quantitative data was retrieved. The five items of this part of the survey are as presented in Table 1. The qualitative data was collected both from (4) the Comments part of the post-surveys and the focus group interview held with the participation of randomly selected 7 students from each group in the last week of the course. The students' responses to the questions on what they think about (Q1) the course, (Q2) the assessments, (Q3) oral communication skills in general were recorded and grouped as 1st group and 2nd group's views on the course as presented in Table 3. The written comments from the surveys were also added to the chart displaying commonly used words along with their appearance frequencies defining the course provided.

The rubrics used by Skaggs School of Pharmacy, University of Colorado "Taking a Medical History Rubric, Counseling on Self Care Product Rubric, Counseling on Prescription Product Rubric" were used for the evaluation of the students' oral communication skills. The means of both group's oral communication skills grades they collected from the Oral Assessment Part of the two midterm exams and three individual Oral Assessments were also screened and are displayed in Figure 4.

The 1st group completed the assessments through face-to-face interview sessions and they were evaluated through the rubrics by four different groups of standardized faculty from the School of Foreign Languages and the Faculty of Pharmacy. A methodical change in this

assessment was implemented for the 2nd group in the second year. The students were given the patient-pharmacist case scenarios in advance and they were asked to record and hand in their performances to be assessed by the same standardized faculty. The results of this change in the assessment for both groups (n=78) and the frequency for each group, demonstrated in Table 2, was compared to monitor the outcomes.

Results and Discussion

Fifty-nine (59) pre- and post-surveys were gathered from each group, comprising 76 percent of the total student number completing the course. Student consent was explicit in their completion of the surveys. The Cronbach Alpha value of .93 indicated that the internal reliability of the Part III of the survey was adequate.

Based on the data from the pre- and post-surveys, Table 1 shows that students who received the course were mainly positive both at the beginning and at the end of the course. As it is seen, both group of the students' course expectancy and sense of achievement upon completing the course were high. The majority of the students gave 4-5 for the items on the Likert scale which hold the percentage of ˜77 – displaying a stable positive perception without any dramatic changes before and after the training.

Part III *I believe this course will help me / helped me*	Pre Mean	Pre SD	Post Mean	Post SD
improve my oral communication skills in English	4,00	,946	3,91	,915
learn new terminology and vocabulary for effective communication	4,06	1,04	4,13	,730
gain new perspectives in patient centered care	3,89	1,10	4,25	,882
increase my career prospects	3,93	,980	4,00	,909
practice my profession in international settings	4,00	,964	3,98	,973

Table 1. Pre- and Post- Course Survey Mean and Standard Deviations

The data in Table 1 shows that the students' belief in their learning new terminology and vocabulary for effective communication (M=4.06), gaining new perspectives in patient centered care (M=3.89) and the course's help in increasing their career prospects (M=3.93) was comparatively lower prior to the training. Apparently, participation in the communication skills course most effectively promoted the students' gaining new perspectives in patient centered care, which constitutes the core component of the course provided. However, there is a decrease in the students' belief in their "oral communication skills' improvement in English" (Pre-M=4.00, Post-M=3.91) and "practicing their profession in international settings" (Pre-M=4.00, Post-M=3.98) that required further investigation.

The data presented in Figure 1 may help explain the reason for the decline in the students' perception of their oral communication skills improvement in English, the language of the all courses delivered at the university. When the students' background in learning English was focused to display the years spent acquiring the language (1-5, 6-10, 10 + yrs.), it was found that 88 percent of them have been learning it for over 6 and more years. The students, therefore, may have changed their belief that the course did not contribute to their communication skills in

English at all since most of them may have already known the introduced verbal communication patterns as "How do you feel today?", "What did your doctor tell you to expect from this
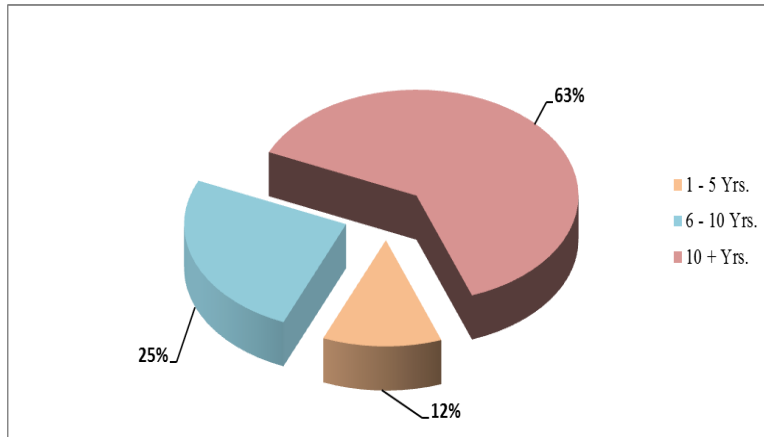
medication?", and/or "Could you please show me how to use this medication?".

Figure 1. Students' Background in Learning English

Screening of the student nationalities may contribute to discover the reasons behind the slight downturn in the means for the last item searched in the survey: "The course will help me practicing the profession in international settings". As Figure 2 and Figure 3 show that 43 Turkish students consisted the majority of the group, holding 75 percent of the total student number, whereas the remaining 16 students held 25 percent of the trainees from various -but mainly- Eastern, Middle-Eastern, African countries; Nigeria, Iraq, Egypt, Syria, Iran, The United Arab Emirates, Bulgaria, The UK and Greece. Subsequent to the training they received, the group holding the majority may have changed their view that they would never like or have the chance to work abroad in an international, therefore, multinational and multicultural environment as clinical pharmacists.
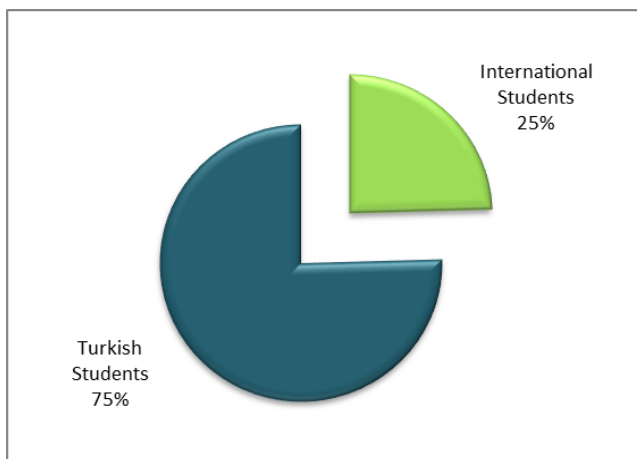

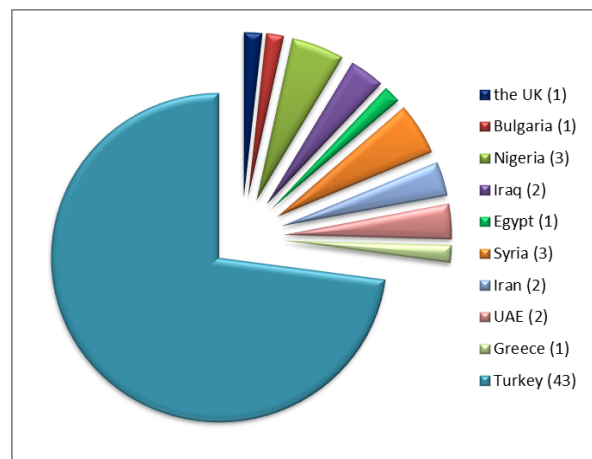Figure 2. Overall Percentages of Student Nationalities

Figure 3. Students' Distribution of Nationalities

The results of the Oral Assessments point out an overlap between the students' sense of achievement in the patient centered care approach and various lexical input provided through the course. As indicated in the pre- and post- means of survey item #2 (Pre M=4.06, Post M=4.13) and item #3 (Pre M=3.89, Post M=4.25), trainees' belief in these areas demonstrated positive change in parallel to their communication assessment grades as shown in Figure 4.
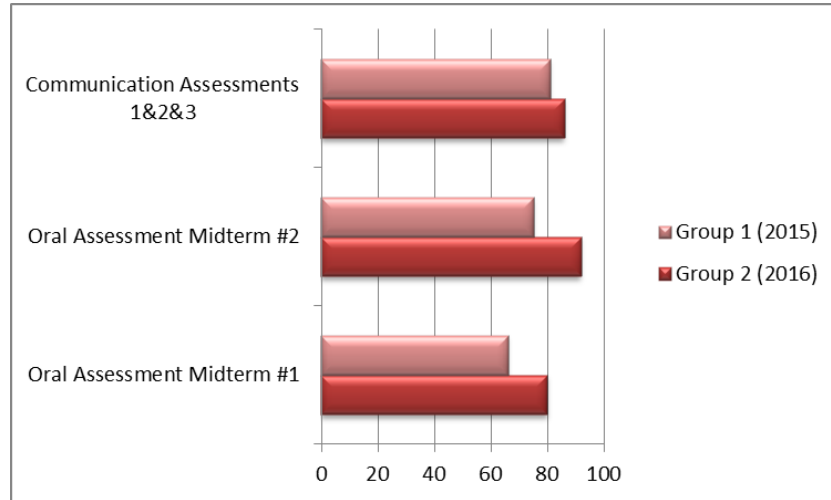

Figure 4. Students' Grades of Oral Assessments

The change in the oral assessment method was implemented in the second year to achieve better outcomes for each skill practiced through the course. The statistics on Table 2 demonstrates that in contrast to the first group assessed in face-to-face encounters, the second group of trainees received relatively higher grades with the means 74.42 of the former and 86.19 of the latter. It is clear that assessments over videotaped performances contribute to students' communicative skills to a considerable extent.

	Mean	Median	Std. Dev.	Range	Min.	Max.
Group 1 Face-to-Face	74,42	74,16	15,41	66,00	32,00	98,00
Group 2 Video Recording	86,19	87,33	5,98	26,67	68,33	95,00

Table 2. Frequencies for Assessments in the Face-to-Face Group and the Video Recording Group

The focus group interviews were held subsequent to the communication skills course for both the first group and the second group of learners. The students' answers to the three questions were listed as follows:

	1st Group (2015)	2nd Group (2016)
Stdt.1	*I am sure the things we have learned will help me greatly in my pharmacy store in the future.*	*Every lesson was interactive and we did lots of role-plays after the theories, so I remember everything.*
Stdt.2	*Didn't like the idea of memorizing all the dialogs and the questions to ask the patient, but now they are nailed in my mind.*	*The lessons were quite enjoyable. Their being so motivated us in other departmental lessons.*
Stdt.3	*Face to face encounters were quite useful indeed. We got so excited before them. This caused us remember everything by heart.*	*We had the chance to stop the record and correct the problematic points and rerecord our videos. We had to shoot ourselves for so many times.*
Stdt.4	*I still doubt if I will have enough time to introduce myself to each patient; ask all the questions in the correct order when the store is filled with people.*	*This video recording way helped me get quite good grades for the oral exams. I feel lucky.*
Stdt.5	*I think this course did not contribute to my speaking skills; neither for my accuracy nor fluency because we already knew how to use simple words while communicating with the patient.*	*I plan to have "a private counseling corner" for my patients for free, just to inform and follow them up well. This will make a difference.*
Stdt.6	*There was much stress and tension during the oral exams, the assessment method should be the same for future students; it should not be changed.*	*The video recording type of exams helped us improve our friendship and further our collaboration.*
Stdt.7	*I learned a lot of terminology and new vocabulary, but I did not learn anything new for my English speaking skill, except for the word "pneumonia".*	*I believe I improved my communication skills a lot; especially when I compare my first video on counseling and the last one. The change is great indeed.*

Comments (4)
Word frequencies - based on their appearances in students' written comments:
excellent (5), helpful (2), new (5), role-plays (3), demanding (3), enjoyable (6), stressful exams (4), thank you (7)

Table 3. Views Presented in the Focus Group Interviews & Comments (4) Part of the Post-Survey listing the commonly used vocabulary while defining the course.

As the above answers demonstrate, the majority of the students held the opinion that they favored course due to its being motivational, containing interactive sessions and role-plays, enabling corrective repetitions and less stressful assessments through the video recorded assessment method. In line with the pre- and post-surveys, the improvement in the oral communication in terms of English is not favored as it is seen in the statements recorded in focus groups. A group of words/phrases holding positive attributes "excellent, helpful, new, enjoyable and thank you" were noted down as frequent words along with the ones with negative attributes "demanding, stressful" which the learners used for the training provided.

Conclusion

As the outcomes of this study demonstrate, the communication skills course was effective in improving both groups' communication skills in general. It is obvious that the course introduced the students with new perspectives in patient centered approach along with new terminology and vocabulary used in their prospective health-related interactions and environments. Although the trainees retained the belief and expectation that the course increased their career prospects, it was found they were not positive that the course improved their oral

communication skills in English. Similarly, their belief in practicing the profession in international settings was not favored by the groups. Therefore, future studies should give special attention to the reasons why students rated the first and the latter lower.

This study also implies that the innovative changes as "video recorded vs. face-to-face role-plays" in the oral assessments in similar courses, specifically in communication skills courses, may help increase the outcomes expected from the trained undergraduates.

There were limitations to this study since it was conducted with the two groups of third-year pharmacy students attending the Oral Communication in Health Sciences Course in 2015 and 2016 spring terms; leaving out the third group of trainees. The primary aim of the study was to determine the perceptions of these trainees towards the course provided. The pre- and post-surveys designed only to investigate the beliefs of the students; leaving out the dimensions of the demographics and further analysis of different variables among these two group members.

It would be a suggestion that more pharmacy students should be introduced to oral communication skills course within the frame of patient centered care approach as it constitutes the core of the paradigms of today's health environments.

A further investigation may be conducted in the future to find out the pharmacy students' attitude and perceptions for their careers as they start practicing clinical pharmacy. With such study, the effectiveness of the course and its actual results based on the reflections of the trainees about real life experiences may be screened and documented from the perspective of patient centered care.

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