Experiences in Teaching and Learning

Comparing student self-assessments of global communication with trained faculty and standardized patient assessments

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ABSTRACT

Background and purpose: Assess the reliability of first year pharmacy student assessments completed by faculty members in comparison with a standardized patient (SP), and student self-assessments during a structured educational module on communication.

Educational activity and setting: Pharmacy students completed four stations focused on communication with an SP. During each encounter, students completed a self-assessment and were evaluated by a faculty member and a trained SP. A five point Likert scale was used to evaluate student performance. Faculty assessments were compared against all others. A Pearson correlation coefficient for total scores was used and a Cohen's kappa was used to compare inter-rater reliability. Agreement and correlation was performed with student results categorized into poor, adequate, and exceptional performance based on faculty evaluation.

Findings: Twenty-four students participated. In all stations, student self-assessments were graded higher than corresponding faculty and SP assessments. Agreement between faculty, SP, and self-assessment was fair to slight ($k < 0.4$) for all comparisons but only significant ($p < 0.05$) between the faculty and self-assessment. After categorization, there was a small, non-significant correlation between faculty and self-assessment ($r = 0.13$, $p = 0.21$) and moderate and significant correlation between faculty and SP ($r = 0.32$, $p = 0.001$). Categorized inter-rater agreement was fair for all comparisons ($k < 0.2$) and only significant ($p < 0.05$) between faculty and SP assessment.

Discussion: Pharmacy students in their first professional year assess their communication skills more positively than other evaluators. Further instruction for students and reflection may be required to build understanding of global assessment in communication.

Summary: There is high incongruity between student self-assessment and faculty appraisal.

Background and purpose

Communication skills are found throughout all levels of Bloom's taxonomy of learning, incorporating lower and higher orders of thinking.[1] Pharmacy students are taught how to communicate professionally from an early point in their pharmacy program to provide them with the skills for effective pharmaceutical care. At the College of Pharmacy, Qatar University (CPH-QU), the Association of Faculties of Pharmacy of Canada (AFPC) educational outcomes and the National Association of Pharmacy Regulatory Authorities (NAPRA) professional competencies were adopted as the educational and practice standards for graduates since the inception of the college. These standards clearly articulate the importance of becoming trained practitioners who are able to communicate effectively with patients, other health professionals, and the public. For student pharmacists, developing competence in

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communication is as pivotal as developing their knowledge base and clinical skills for integrating therapeutics with pharmacy practice.[2] As such, verbal and non-verbal communication activities with diverse audiences and using a variety of teaching strategies must ideally be introduced early in the students' undergraduate pharmacy education.

Communication-focused educational activities using standardized patients (SPs), role-playing, and standardized colleagues (SCs) have been reported in the literature to help pharmacy students develop their communication skills through the provision of timely formative feedback and student reflection.[2–5] However, there is limited published research on standardized assessments of student communication skills. Previous pharmacy education literature has suggested poor correlation observed between faculty, SPs, SCs, student peer and student self-assessments of verbal and non-verbal communication skills.[6–9] Due to this, students may have difficulty understanding areas for improvement as their perceptions of the interaction may be drastically different from how it is observed or evaluated by others.

The importance of self-assessment in pharmacy education has also been highlighted in the literature, and is described as essential in the formative education of pharmacists as well as in their continuous professional development.[6,10] The Accreditation Council for Pharmacy Education (ACPE) in the United States and the Association of Faculties of Pharmacy of Canada Education have stated that 'self-awareness' is a key element of educational outcomes in that pharmacy graduates must be able to examine and reflect on personal skills and abilities that could enhance or limit personal and professional growth.[11,12] Self-reflection is an essential part of this process, as it provides insight about how people view themselves and their behaviors relative to peers and supervisors.[7] It also reveals self-assessed strengths and weaknesses, identifies the barriers that must be overcome to surmount limitations, and expresses future opportunities for growth.[6,10] In the area of communication skills, limited reports currently exist regarding self- and peer-assessment in the pharmacy curricula, particularly if self-reflection is applied immediately after an assessed activity is completed.

This study will assess the reliability of pharmacy student self-assessment in comparison with faculty and SP assessment during a structured educational module focused on the verbal and non-verbal aspects of an interaction with a patient. Findings will be used to make improvements in the current pharmacy curriculum, more specifically in the educational module that focuses on building the communication skills of students.

Educational activity and setting

The CPH-QU offers a four year, undergraduate degree program that has been accredited by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP). The CPH-QU curriculum incorporates a mandatory Professional Skills series through all four years of the program and aims to develop the practical skills of a pharmacist. Within this Professional Skills course, a Communications Module focused on patient counseling was introduced to first-year pharmacy students (P1) at CPH-QU in fall semester of the 2015–16 academic year. This module comprised of two parts: a three-hour lecture followed by a three-hour skills practice laboratory. All lessons and assessments at CPH-QU are conducted in the English language.

During the lecture students were introduced to the general principles of interpersonal communication skills that are important when engaging with patients for counseling purposes, such as starting dialogue, gathering information, giving information, and ending an interview. Next, students were given the opportunity to role play a patient interaction in pairs with the guidance of a faculty member. Following the role-playing activity, the students were introduced to the global communication assessment and then watched a total of three videos with different patient counseling scenarios displaying varying proficiencies in communication skills. After each video there was an open discussion regarding the verbal and non-verbal communication skills displayed and to review what was previously taught.

The second part of this module included a skills practice laboratory that consisted of four, 10-min, role-playing stations where the goal for the student was to establish patient rapport, gather patient information, counsel the patient and end the interaction with an SP. These patient interactions were designed by faculty investigators to simulate simple pharmacist/patient encounters where the patient is seeking basic drug information or requesting product selection from the part of a pharmacist. The stations differed in therapeutic topics and included: 'back pain', 'heart burn', 'nasal congestion' and 'sore throat'. In each station students were provided flashcards (see example in Fig. 1) that contained summarized information regarding the main patient complaint, the medication name to be used for such complaint, the directions for use, effect, and precautions of the drug. All flashcards were created by college faculty. No other textbooks or references were provided to the students as the flashcards contained all the necessary information for the interaction. Each student was given two to three minutes to familiarize themselves with the information on the flashcard before starting the interaction with the SP.

Patient #3: COUGH	
1. Medication Name:	DEXTROMETHORPHAN (Tussilar®)
2. Use:	To suppress the cough
3. Directions:	Use 20-30 drops 1-4 times daily, whenever you have bad coughing. <u>Put these in a drink.</u>
4. Effect:	You should notice relief within 30 minutes, but you may have to repeat 4 times daily.
5. Precaution:	If your symptoms do not improve in a week, you should see a doctor.

Fig. 1. Sample flashcard.