

Overcoming Communication Apprehension in Pharmacy Students

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Abstract

Based on the growing market demand and high orders of responsibilities for pharmacists, this study examined communication competence in pre-pharmacy students through a survey of 209 freshmen college students at a northern California private university. The study found that pre-pharmacy students had the highest communication apprehension when compared with other majors such as social sciences, business and natural sciences in the same university ($t=3.53$; $p<.001$). The results were alarming since future pharmacists must have high communication competency, as they will need to offer high levels of communication services to their patients. Thus, a follow-up study was conducted, which examined possible ways to help pre-pharmacy students reduce their communication apprehension and enhance their communication competence through a focus group investigation. The focus group generated six principles to reduce communication apprehension and enhance communication competency for pre-pharmacy students including self-motivation, social involvement, participation communication training, self-regulation, uncertainty reduction through socialization and adaptability. Suggestions for reducing future pre-pharmacy students' communication apprehension and limitation of the study are provided.

Keywords: Communication Apprehension, Pharmacy Communication, Self-motivation

1. Introduction

The profession of pharmacy is drastically growing to become prominent in our society.¹ Not only are there more pharmacies and pharmacists in sheer numbers, but their responsibilities are expanding as well. In numbers, according to the Bureau of Labor Statistics, pharmacists are expected to have a 14% increase in employment in the next ten years.² In responsibilities, specifically in California, Governor Jerry Brown signed the pharmacist status bill into law, giving pharmacists in California the title and recognition as healthcare providers, thus increasing their direct involvement with patients and interactions with doctors.³ Since the occupation itself is growing to become more involved in society, pharmacists are in need of effective communication skills in order to match their increasing interactions with patients and doctors, and to accomplish their daily tasks. It is clear that communication is a crucial skill to have as a pharmacist. However, it has been studied that communication apprehension, which is shown to be prominent in pharmacy students, can drastically hinder the communication abilities of pharmacists.⁴ Communication apprehension can pose a large challenge to the effectiveness and overall job performance of pharmacists. Needless to say, it is important to study communication apprehension in pharmacy students who will in turn become the new incoming pharmacists to serve our society. Hence, this study examines and analyzes communication apprehension of pre-pharmacy students in order to enhance the communication competency of pharmacy students and pharmacists alike.

2. Literature Review

2.1. Importance Of The Pharmacy Profession And The Growing Role Of Pharmacists

In regard to the importance of the pharmacy profession to society, pharmaceuticals are playing an increasing role to support our society.⁴ As of 2014, there has been a 90% increase worldwide in total spending towards medicine as compared to that of 2005. This growth is an indication that pharmaceuticals are becoming a larger part of the society and culture. For example, the introduction of the concept of “pharmaceutical care,” symbolizes its prominence and importance to the current population’s well being and to the future outlook of care.

The continual expansion of responsibilities of pharmacists’ exemplifies the importance of the field. Several studies provided details on the expanding roles of pharmacists. Freeman et al. noted that within the past two and a half years, pharmacists have gained new responsibilities including prescription auditing, medication review, and medication reconciliation.⁵ Needless to say, the growth of pharmaceuticals and the reliance of drugs have created a larger impact on pharmacists. As the roles of pharmacists continue to increase, their interactions with patients, doctors, and other healthcare personnel also expand. These increasing interactions call for a higher level of communication competence of pharmacists.

2.2. Communication And Pharmacy

Many studies have been conducted showing the importance of communication in pharmacists and pharmacy students. Beardsley et al. (2007) suggested that in order to deliver the best healthcare and protect the well-being of the patient, the pharmacist must be able to establish a trusting relationship with the patient in which critical health information will be conveyed through.⁶ Without competent communication abilities, a pharmacist would be unable to provide their patients with essential care and necessary attention. With the lack of communication competency, the inability to convey accurate medical messages would put the well-being of others at stake. On a milder scale, a pharmacist who lacks communication and interpersonal skills would not be able to provide the best service to their patients. Included in the general term of communication skill and competency is the ability to form a trusting relationship between the pharmacist and patient, this relationship is the critical channel in which important health information are exchanged. Failure for the pharmacist to establish such a relationship would put the patients’ best interests at risk. In combination of many previous studies, Majzub et al. in 2010 pointed out that, “the quality of communication between pharmacist and patient is essential in creating effective healthcare.”⁷ The necessity of superior communication skills in pharmacists is clear, as it is studied that communication is the foundation of the pharmacy profession.

2.3. Communication Apprehension And Pharmacists

A term first coined by James McCrowskey in 1970, communication apprehension is “fear or anxiety associated with either real or anticipated communication with another person or persons.”⁸ Communication apprehension has further been studied specifically among pharmacy students. It is known that communication apprehension in pharmacy students may cause the future pharmacist to “avoid contact with patients and other health professionals,” in addition to limiting the individual’s willingness to communicate with patients and convey important healthcare information.⁹ Based on the importance of communication in the pharmaceutical healthcare setting, communication apprehension in pharmacy students proposes a problem for the healthcare system.

2.4. Research Question

A review of the literature indicated an immediate urgency of examining communication apprehension levels of pharmacy and pre-pharmacy students in order to find a way to reduce the apprehension that has the potential to render pharmacy care ineffective. Especially in our current society, with high dependence on pharmaceutical care and the increase in responsibilities for pharmacists, it is critical to conduct the current study. This study proposed the following research question: “To what extent, do pre-pharmacy students vary in their communication apprehension from students in other majors?”

3. Method

3.1. Sample

The sample contained 209 college students from a northern California university with 89 (44%) male respondents and 115 (56%) female respondents. The total of 230 questionnaires were distributed and 209 were collected and used for the study, representing a response rate of 91%. The respondents ranged in age from 17 to 40, with a mean of 20.25 years. The racial/ethnic composition of the sample was 41.7% Caucasian, 33.2% Asian American, 13.4 % Hispanic, 2.4% African American, and 8.5% “others.” The demographics of the sample highly represent that of the university. The sample consisted of mainly freshmen students from a variety of majors including pre-pharmacy, social sciences, business, natural sciences, and humanities.

3.2. Procedure

A self-administrated questionnaire was distributed to subjects during class sessions of 30 students. Classes were selected by convenience in the communication department. The classes that were selected satisfied a general education requirement, which maximizes representativeness of all majors. The teaching assistants followed the protocol of the research design and informed the participants that the survey was voluntary and the information was completely confidential and anonymous and should be completed as honestly as possible. Students were not offered any incentives, and were informed that participation was completely voluntary. The instructor gave a quick debriefing of the study to the participants after the questionnaires were completed. The two-page questionnaire took 8-10 minutes for the participants to complete.

3.3. Measurements

The survey aimed to measure the students’ communication apprehension levels. In order to do so, the study adopted McCroskey’s Personal Report of Communication Apprehension instrument (PRCA-24), which has been used by researchers and professionals alike to measure communication apprehension in an individual.⁹ This instrument measured communication apprehension levels using 24 Likert scale statements addressing different communication contexts including group, meeting, interpersonal, and public communication. Statements included, “I dislike participating in group discussions; I am afraid to express myself at meetings; ordinarily I am very tense and nervous in conversations; and I am afraid to speak up in conversations.”¹⁰ The scale had a reliability alpha of .92, indicating a level of high reliability.

4. Results

4.1. Descriptive Analysis

Data were entered and analyzed using Statistical Package for Social Science (SPSS) and both descriptive statistics and inferential statistics were conducted. Descriptive statistics of the communication apprehension levels of each major, as shown in Table 1, indicated that pre-pharmacy students had the highest PRCA-24 scores (\bar{x} =71.28) compared to their peers of other majors. Following pre-pharmacy students were humanities (\bar{x} =65.13), natural science (\bar{x} =62.91), and business (\bar{x} =61.78). Social science majors such as psychology, communication, and sociology students scored the lowest (\bar{x} =59.84), representing low levels of communication apprehension. Other descriptive results showed pre-pharmacy students had distinctively higher agreeability with specific statements such as “I am tense and nervous while participating in group discussions; I am afraid to speak up in conversations; while giving speech, I get so nervous that I forget facts I really know.” Solely based on the descriptive results, pre-pharmacy students seemed to have noticeably higher communication apprehension as compared to their peers of other majors.

Table 1. Communication Apprehension Levels Between Majors

Major	N	Mean	Std. Deviation	Range
Pre-pharmacy	43	71.28	15.13	80.00
Humanities	8	65.13	9.09	98.00
Sports Sciences	25	62.92	15.45	55.00
Natural Sciences	37	62.91	14.32	74.00
Business	37	61.78	14.61	69.00
Social Sciences	33	59.84	17.43	69.00

4.2. Statistical Tests

In order to show statistical difference in communication apprehension among these different student majors, inferential statistics were run on the data. An analysis of variance (ANOVA) was run to test for communication apprehension differences among six categories of academic majors. The results indicated that communication apprehension scores differed significantly, ($F((5,177))=2.699$; $p=.022$), with pre-pharmacy majors having significantly higher communication apprehension than the rest of the majors. An independent-sample t-test was also conducted to compare communication apprehension levels between pre-pharmacy students and non pre-pharmacy students. There was a significant difference ($t= 3.53$; $p< .001$) in the scores for pre-pharmacy students ($\bar{x}= 71.27$), and non pre-pharmacy students ($\bar{x}=62.02$). These results suggested that pre-pharmacy students had significantly higher levels of communication apprehension when compared to their peers.

5. Follow-up Qualitative Study

With the pharmacy profession growing to give more interactive responsibilities to pharmacists, pharmacists are expected to depend more on their communication abilities to successfully help their patients as healthcare providers. The results of the survey research discussed above indicated that pre-pharmacy students had a significantly higher level of communication apprehension as compared to their peers. These shocking results called for an immediate and in-depth analysis of communication apprehension in pre-pharmacy students. The combined review of literature and study results made clear that it is of high importance to examine ways to lower communication apprehension levels in pharmacists and pre-pharmacy students alike in order to increase communication competency. Therefore, the study proposed the second research question: “What methods can pre-pharmacy students use to help reduce their communication apprehension?”

In order to answer the second research question a qualitative study was conducted through a small focus group of four pre-pharmacy students. The purpose of this focus group was to investigate ways that communication apprehension can be reduced in pre-pharmacy students.

5.1. Method

The focus group of pre-pharmacy students explored several topics addressing pharmacy, communication anxieties, and other topics regarding overall communication. These topics covered information such as why pharmacy was their choice of academic major, how they view communication within the profession of pharmacy, their personal feelings towards their own communication abilities with others, and success principles for increasing personal communication competence. Interestingly enough, all participants identified themselves as introverts and indicated that they first chose the profession of pharmacy due to the false impression that the job was a “behind the counter” career in which they could keep to themselves and “just count pills.” The group unanimously agreed that once they entered college, they were surprised to discover that, on the contrary, pharmacists are required to have good communication skills. Based on the focus group discussion, the results were analyzed by hand and the study generated six themes as key principles to reduce communication apprehension.

6. Six Principles to Reduce Communication Apprehension

Through the responses received from the focus group, the study generated six principles for pharmacy students to reduce their communication apprehension. The first and primary principle is self-motivation, which is followed by five secondary principles: social involvement, participation in communication training, self-regulation, uncertainty reduction through socialization, and adaptability.

6.1. Self-Motivation

The primary principle to reduce communication apprehension is self-motivation. Self-motivation is a state in which an individual is driven by personal incentive to take initiative. Thus, in the case of reducing communication apprehension, the primary principle is to be personally driven to work actively to reduce one's own anxieties. This is the most powerful principle for pre-pharmacy students because personal motivation is a stronger influence than any other. Without being self-motivated, the other principles are not as powerful or may not work at all.

Specifically, the participants of the focus group identified self-motivation to increase communication with others as the key principle to success. One of the participants noted, "Realizing that pharmacists needed good communication skills pushed me to get out there and try to talk, communicate with others more. I wanted to get rid of the anxieties I naturally felt."

6.2. Social Involvement

The second principle is social involvement, or actively getting involved in social functions. The participants acknowledged that increasing their involvement in social activities and events proved effective in reducing communication apprehension. Some of the social involvement activities noted were joining professional fraternities, clubs, and organizations, in addition to going to community and university held events. Upon reviewing their communication apprehension reduction process, one participant recalled, "joining groups and attending social events helped me greatly."

6.3. Participation In Communication Training

The third principle is participation in communication training, which is the process of taking a class that focuses on improving communication skills. Such classes can be found through the university, online, or through other means. Specifically, a few participants noted that taking public speaking at the University not only helped them gain communication skills through an academic perspective, but also provided an occasion for them to practice their speaking ability in front of a live audience.

6.4. Self-Regulation

The fourth principle is self-regulation, or managing one's own emotions and feelings. With self-regulation, an individual is able to control and regulate his or her own feelings, including those feelings of anxiety regarding communicating with others. One participant recalled his personal method of reducing his anxieties, "I try to tell myself to relax, and I say to myself 'don't be afraid to get out there.'" By regulating their feelings, pharmacy students can create a more comfortable environment for themselves, helping them relax and reduce their communication apprehension.

6.5. Uncertainty Reduction Through Socialization

All of the participants remembered that a large source of their communication anxiety was derived from arriving in a new and unfamiliar environment, such as when they first began college. They recalled that they did not know how to act when in an unknown environment with unfamiliar people. The lack of knowledge on the norms and customs caused them to feel anxious and uncertain, which hindered their abilities to communicate. In order to avoid these pressures and the detrimental outcomes that follow, an individual can reduce their uncertainty through socialization. This fifth principle is to increase socialization activities in order to get to know the situation better, thus reduce

uncertainty and reduce anxiety. One participant summarizes his experiences on reducing anxiety, “socialize more, and make more friends.” In general, getting to know the situation, the people, and the atmosphere can in turn create a comfortable environment in which the individual will feel less anxiety when communicating to others.

6.6. Adaptability

The sixth and final principle to reducing communication apprehension is adaptability, or the ability to adapt to new environments, and learn about and understand other individuals. Participants agreed that the transfer from high school to college threw them in a completely foreign environment. Under these circumstances, they faced high communication apprehension when communicating to other people. However, they were able to overcome this problem through their ability to adapt to the new environment by keeping an open mind and learning through other people who were already familiar with the environment. One participant suggested that staying open minded, or “going with the flow,” helped him feel more included and comfortable with other individuals, and prevented him from feeling like he “stuck out like a sore thumb.” In unfamiliar situations feelings of exclusion or feeling out-of-place can be one of the major causes of anxiety. Learning to adapt to the environment can reduce those feelings, and in turn reduce communication apprehension.

7. Discussion

7.1. Implications

There are several implications of the study. Through a quantitative method, the study found that pre-pharmacy students had significantly higher communication apprehension when compared to their peers. This finding indicates a potential challenge to the quality of healthcare provided by these future pharmacists. It is known from previous studies that a pharmacist with high communication apprehension is less likely to communicate fully with their patients and convey the necessary health information. This survey research finding leads to the second part of the study in which a qualitative approach was used to generate ways to reduce the communication apprehension in pre-pharmacy students. Six principles to reduce communication apprehension were generated, including one primary principle followed by five secondary principles. These principles are critical to the development of communication competence, including self-motivation, social involvement, participation in communication training, self-regulation, uncertainty reduction through socialization, and adaptability.

7.2. Limitations

The study faced a couple limitations. A convenient sample was used in the quantitative study, which poses constraints in generalizability of the results. Also, the measurement of communication apprehension was based on self-reported results. Also, the focus group only offered insights from a small group. Therefore, it is important to take into account these factors before using the results in the decision making process.

7.3. Suggestions For Future Research

In future studies, it would be beneficial to conduct a longitudinal study following the pre-pharmacy students from freshman year to professional school graduation. The trends in communication apprehension throughout these years of growth could be examined and applied to further develop methods of reducing communication anxieties. Since communication apprehension does exist widely among pre-pharmacy students, students should be given tips or methods to help reduce communication apprehension,. Also, it would be useful to conduct multiple focus groups of pre-pharmacy students, pharmacy students, and first year pharmacists to gain insights on the best practice of reducing communication comprehension and enhancing communication competence in the healthcare profession.

8. Conclusion

The study examined communication apprehension levels of college students using a quantitative survey approach. The results indicated that pre-pharmacy students had significantly higher levels of communication apprehension when compared to the rest of other majors. These results suggested that more attention needs to be focused on reducing communication apprehension in pre-pharmacy students. A qualitative approach was taken to better understand communication apprehension in pre-pharmacy students and to explore methods to reduce their anxieties. Through a focus group study, six principles for reducing communication apprehension were generated, including self-motivation, social involvement, participation in communication training, self-regulation, uncertainty reduction through socialization, and adaptability. The adoption of these principles can help current and future pharmacy students manage their apprehension levels, and lead them to become competent future pharmacists.

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