

**COMMUNICATION APPREHENSION AMONG PHARMACY STUDENTS AT THE  
UNIVERSITY OF LAGOS, LAGOS, NIGERIA**

**BOLAJOKO .A. AINA<sup>1\*</sup> and OLUBUNMI .S. IGBIGBI<sup>2</sup>**

<sup>1\*</sup> Corresponding Author

Dept. of Clinical Pharmacy and Biopharmacy, Faculty of Pharmacy, University of Lagos,  
Idi Araba Campus. [bolajokoaina@yahoo.com](mailto:bolajokoaina@yahoo.com) 08023091623

<sup>2</sup>Department of Pharmacy, Lagos University Teaching Hospital, Idi Araba.  
[bunmi.ogunba@yahoo.com](mailto:bunmi.ogunba@yahoo.com)

## **ABSTRACT**

### **BACKGROUND**

Communication apprehension (CA) is an individual level of fear or anxiety associated with either real or anticipated communication with another person(s). The pharmacist with high communication apprehension would be expected to talk less with patients than other pharmacists do, but also talk less about professional concerns and would not likely be perceived as a credible source of drug information or on an intelligent person.

Thus the objective of the study was to determine the level of CA among pharmacy students who will eventually become practicing pharmacists

### **METHODS**

This study was carried out in the Faculty of Pharmacy University of Lagos, among the students in all the professional classes (200L - 500L) using questionnaires which consisted of two parts. Part A focused on demographic data, while part B was an adaptation of the format on personal report of communication apprehension (PRCA 24).

### **RESULTS**

Majority of the students (76%) were averagely communication apprehensive while only about 4% were highly communicative apprehensive. The overall mean score was  $60.87 \pm 13.34$ . There was no statistically significant difference between the mean scores for all the levels of study as determined by one-way ANOVA.

### **CONCLUSION**

From the results of this study, the pharmacy students of the University of Lagos are averagely communication apprehensive.

**KEY WORDS:** Communication apprehension; pharmacy students, University of Lagos

## **INTRODUCTION**

To function effectively in today's society, people must communicate with one another. Communication apprehension (CA) is an individual's level of fear or anxiety associated with either real or anticipated communication with another person(s)<sup>1,2</sup>. According to Friedman "A tendency to be anxious when communicating may be specific to only a few settings (e.g., public speaking) or may exist in most everyday communication situations, or may even be part of a general anxiety trait that arises in many facets of an individual's life"<sup>3</sup>.

The consequences of CA are emotional, educational and social. Shyness and reticence affect the social skills necessary for students to make friends. Shy students tend to confine their career aspirations to vocations that require little oral communication. They seem to have a higher need to avoid failure, and they have less achievement or success motivation than other students<sup>3,4</sup>.

The acceptance of the clinical role of the pharmacist brings numerous new responsibilities and necessary capabilities. By definition the clinical pharmacist will therefore engage a greater degree of both patients and physician contact<sup>5,6</sup>.

The third WHO Consultative Group on the Role of the Pharmacist held in 1997 and proposed the concept of a 'seven-star pharmacist' which defines the roles of the pharmacist as being a caregiver, decision-maker, communicator, leader, manager, life-long-learner, and teacher<sup>5</sup>.

As a communicator - the pharmacist is in an ideal position between physician and patient. As such, he or she must be knowledgeable and confident while interacting

with other health professionals and the public. Communication involves verbal, non-verbal, listening and writing skills <sup>5</sup>.

According to Baldwin *et al.*, communication apprehension can be a possible fear factor for a pharmacist that results in avoiding patient communication or counseling and discussion forums with professional peers<sup>6</sup>.

The pharmacist with high communication apprehension would be expected to talk less with patients than other pharmacists do, but also talk less about professional concerns and would not likely be perceived as a credible source of drug information or on an intelligent person<sup>6</sup>.

An earlier study of West Virginia University pharmacy students suggested that approximately one of every five pharmacist may be a person with high CA<sup>6</sup>.

Personal communication by pharmacist has been suggested as a means to: -

- Improve health care.
- Improve the image of pharmacy.
- Expand the pharmacists' role and,
- To improve patients compliance with their therapy <sup>7-10</sup>

McCroskey & Richmond identified four types of communication apprehension viz Trait like, Context-based, Receiver-based and Situational <sup>11,12</sup>.

Overcoming high CA requires either clinical or quasi-clinical methods <sup>2</sup>.

Treatment modalities include: Systematic desensitization <sup>13</sup>, Cognitive modification<sup>14</sup>

and Assertiveness training<sup>15,16</sup>.

The most important type of communication apprehension which will affect the pharmacy student and the pharmacist during practice is oral communication apprehension which happens due to an intense personal fear or anxiety about

communicating <sup>12,17</sup>. In other words, oral communication apprehension is the lack of capability to communicate verbally with people, which afterwards results in ineffective communication.

Oral communication happens to be a key area where the pharmacist is expected to excel in as it is very important in the day to day practice. Hence the objectives of this study were to investigate level of communication apprehension among pharmacy students in University of Lagos and determine whether there is any relationship between level of study and communication apprehension.

## **METHODS**

### **Study Setting:**

Study setting was Faculty of Pharmacy, University of Lagos, CMUL Campus, Idi Araba. University of Lagos is a Federal University located in Lagos. It has three campuses- Akoka campus which is the main campus, College of Medicine (CMUL) campus at Idi Araba and Radiology campus, Yaba. Faculty of Pharmacy is located at CMUL Campus because of proximity to the Lagos University Teaching Hospital (LUTH) for clinical training.

### **Study design/sampling method:**

This was a cross sectional study using and convenient/purposive sampling method.

### **Sample Population:**

The sample population consisted of all pharmacy students in the professional classes (200L to 500L) that consented to fill the questionnaire were involved in the study.

### **Study instrument:**

The instrument of study was a standard questionnaire which consisted of two parts. Part A focused on demographic data, while part B was adapted from Personal Report of Communication Apprehension (PRCA-24).

The PRCA-24 is the instrument which is most widely used to measure communication apprehension. The personal report of communication apprehension is composed of 24 statements, representing feelings about communication. The overall PRCA scores usually vary from 24 to 120. The levels of communication apprehension is categorized into low (scores below 51); average (scores 51 to 80); and high (scores more than 80).

**Data Collection:**

The questionnaires were distributed to consenting students while in lecture rooms. The students were encouraged to fill the questionnaire immediately and return. Filling of the questionnaire takes about eight (8) minutes.

A total of 300 questionnaires were administered to the students in their professional years, 262 were returned and only 246 were found useful for analysis.

**Analysis of data:** Completed questionnaires were coded, fed into a computer and analysed using the excel package. A p-value of 0.05 was selected as the criterion for determination of significance in the data analysis. Frequencies, proportions and mean scores were generated. Student t-test and ANOVA were used to determine any statistical significant difference where necessary for comparing mean scores. Chi square test was done using online chi square calculator ([www.socscistatistics.com](http://www.socscistatistics.com)) using the collated frequency numbers for different levels and sexes to determine any statistical significant difference for these categorical data.

## RESULTS

Two hundred and forty six students participated in this study (Table 1). There were 108 (43.9%) males and 138 (56.1%) females (Table 2).

Majority of the students (76.4%) had average communication apprehension while only about 4% had high communication apprehension (Table 1)

The overall mean score for the students was  $60.87 \pm 13.34$  indicating average CA. The 200 level students had the highest mean score ( $64.73 \pm 10.79$ ) while 500 level students had the lowest mean score of  $59.00 \pm 14.9$ . Other scores are as shown in Table 1.

There was a statistically significant difference between the mean score of 200 level students and the other students,  $p < 0.05$ . Though the 500 level students had lower mean score compared to 300 level and 400 level students however the difference was not statistically significant,  $p > 0.05$ . There was no statistically significant difference between the mean scores for all the levels as determined by one-way ANOVA ( $F=2.29$ ,  $p = 0.079$ ).

Class	Low Communication Apprehension (%)	Average Communication Apprehension (%)	High Communication Apprehension (%)	Total n (%)	Mean Score $\pm$ SD
200L	7 (12%)	50 (85%)	2 (3%)	59(100)	64.73 $\pm$ 10.79
300L	14 (20%)	56 (79%)	1 (1%)	71(100)	60.25 $\pm$

					13.34
400L	14 (23%)	44 (72%)	3 (5%)	61 (100)	59.56 ± 13.68
500L	13 (24%)	38 (69%)	4 (7%)	55 (100)	59.00 ± 14.9
<b>Total</b>	<b>48 (20%)</b>	<b>188 (76.4%)</b>	<b>10 (4.06%)</b>	<b>246 (100)</b>	<b>60.87 ± 13.34</b>

**Table1: Level of communication apprehension and mean scores by level of study**

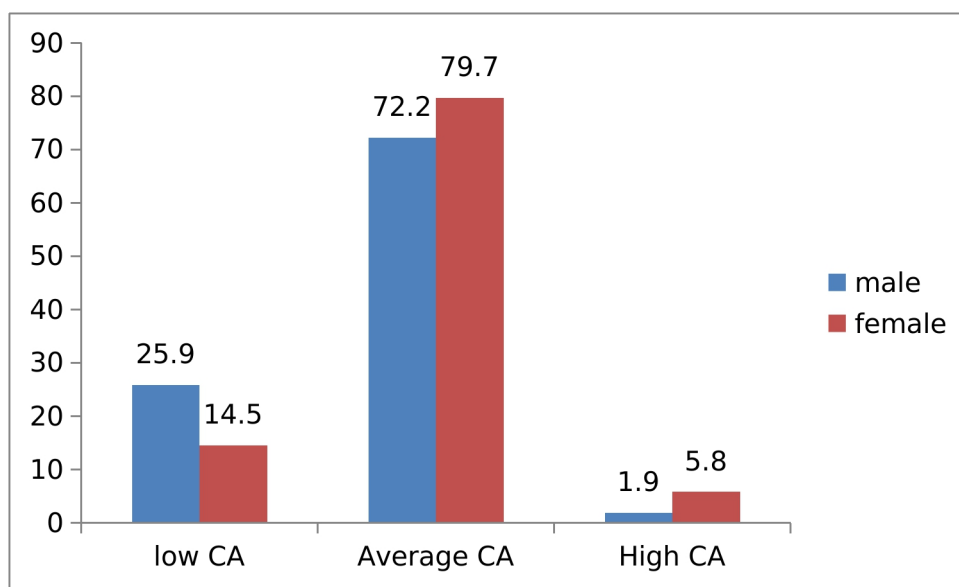
Almost 80% of the female students had average communication apprehension (Figure 1). There was statistically significant difference between male and female for categorized levels of communication apprehension as determined by chi square test ( $p= 0.033$ ,  $X^2 = 6.82$ ).

**Table 2: Level of Communication Apprehension by gender**

	Low Communication Apprehension n (%)	Average Communication Apprehension n (%)	High Communication Apprehension n (%)	Total n (%)
Male	28 (25.92%)	78 (72.22%)	2 (1.85%)	<b>108 (43.9%)</b>



Female	20 (14.5%)	110 (79.7%)	8 (5.8%)	<b>138</b> <b>(56.1%)</b>
Total	<b>48 (19.51%)</b>	<b>188 (76.42%)</b>	<b>10 (4.06%)</b>	<b>246</b> <b>(100%)</b>



**Figure 1: Frequency (%) of Level of Communication Apprehension by Gender**

## **DISCUSSION**

From the result obtained it might be deduced that as freshers in 200L, the students might be communication apprehensive but as they advance in their level of study they become less communication apprehensive since they had the least proportion of those that have low communication apprehension and their overall mean score is also the highest.

Only 4% of the students had high communication apprehension while majority (76.4%) had average communication apprehension. This is encouraging because it implies majority of these pharmacy students will probably turn out to be good communicators which is one of the requirements of a seven star pharmacist<sup>5</sup>. This result is similar to the study conducted among first and final year pharmacy student of the University Sains Malaysia (USM) with the goal being to determine and compare the level of communication apprehension among pharmacy students in the university which indicated that the students had average apprehension towards communication<sup>18</sup>.

This result showed that only about 4% of students have high communication apprehension. This proportion is lower and better than the earlier studies conducted by Baldwin et al.<sup>6</sup>, Berger and McCroskey<sup>19</sup> and Berger et al.<sup>20</sup> where one in every three students had high communication apprehension.

The categorized levels of communication apprehension in both male and female students were statistically significantly different. The males seemed to be better than females because higher proportion of males had low communication apprehension. This might be due to the fact that males are more aggressive while females are rather shy naturally. This finding is similar to the earlier study by Berger *et al.*<sup>20</sup> where female pharmacy students were more anxious and apprehensive compared to male, particularly in public speaking but studies carried out among the non-pharmacy undergraduate university students varied in their findings with respect to gender differences and their overall communication apprehension scores<sup>20</sup>.

In Nigeria pharmacy schools, communication skills topics are incorporated in the clinical pharmacy course to varying degrees. Consequently, it would be expected

that the students especially those in final year should have low communication apprehension but this was found not to be so since only 24% of them had low communication apprehension. This may be explained by the fact that communication skills training alone is not enough to reduce communication apprehension. In fact McCroskey and others have pointed out that traditional speech and communication skill courses may make the problem of communication apprehension worse rather than better <sup>21</sup>.

Students with high communication apprehension if left unattended would become tomorrow's pharmacists with severe communication apprehension, posing a threat to the profession. Since new roles for pharmacists lean heavily on both communication ability and the desire to communicate, when such students become pharmacists, they might lack the necessary communication skills needed to make necessary interventions within the medical team.

The mean total score of communication apprehension of 59 among the final year pharmacy students in this study is lower and better than similar studies by Azmi and Wasif which showed a mean total score of 71.03 and evidence for the existence of communication apprehension among every third undergraduate pharmacy students<sup>22</sup>.

## **CONCLUSION**

Majority of the pharmacy students of the University of Lagos are averagely communication apprehensive and will make good communicators. The few that are highly communication apprehensive should be helped by creating study groups so that students can work with three or four other classmates in improving communication techniques in a non-threatening atmosphere.

## **ACKNOWLEDGEMENT**

The authors wish to thank the students that consented to fill the questionnaires.

**COMPETING INTEREST:** The authors declare no competing interests.

## **REFERENCES**

1. Holbrook HT. (1987) "Communication Apprehension: The Quiet Student in Your Classroom". ERIC Digest. ERIC Clearinghouse on Reading and Communication skills Urbana IL. November 2, 2008. <<http://www.ericdigests.org/pre-926/quiet.htm>>
2. McCroskey JC. (1977) "Oral Communication Apprehension: A Summary of Recent Theory and Research." Human Communication Research 4:78-96.
3. Friedman PG. (1980) "Shyness and Reticence in Students." Washington, D.C. National Education Association.
4. Richmond V. (1984) "Implications of Quietness: Some Facts and Speculations." In Avoiding communication: shyness, reticence, and communication apprehension. J. A. Daly and J. C. McCroskey, eds. Beverly Hills: Sage Publications.
5. World Health Organization. (1997) The role of the pharmacist in the health care system. Preparing the future pharmacist: curricular development. Canada.
6. Baldwin HJ, McCroskey JC, Knutson TJ. (1979) Communication apprehension in the pharmacy student. American Journal of Pharmaceutical Education, 43: 91-93.
7. Smith DL. (1977) Communication its role in the curriculum. Canadian Pharmacy Journal 11: 336-341

8. Temkin LA, Jeffery LP, Gallina JN, Ingalls KK. (1975) Communicating information to the ambulant patient. *Journal of the American Pharmaceutical Association* 15(9): 488-493.
9. Hussar D. (1976) Pharmacy practice. Importance of effective communications. *American Journal Pharmacy* 148: 136- 147
10. Anderson RJ, Benelli NM, Kimberlin CL. (1977) Use of videotaped feedback in training pharmacy students in taking medication histories. *American Journal Pharmacy Education* 41:49-53.
11. McCroskey JC, Richmond VP. (1987) Willingness to communicate. In J.C. McCroskey & J.A Daily (Eds), *Personality and interpersonal communication* (pp. 129-156). London: Sage publication Inc.
12. McCroskey JC. (1970) Measures of communication-bound anxiety. *Speech Monographs* 37(4): 269-277.
13. Pedersen DJ. (1980) Systematic desensitization as a model for dealing with the reticent student. *Communication Education* 29(3): 229-233.
14. McCroskey JC, Richmond VP. (1990) Willingness to communicate: Differing cultural perspectives. *The Southern Communication Journal* 56: 72-77.
15. Marshall PG, Keltner AA and Marshall WL. (1981) Anxiety reduction assertive training and enactment of consequences. *Behaviour modification* 5: 85 -102.
16. Smith MJ. (1975) *When I say no, I feel guilty*. New York: Bantam Books.
17. Stanga KG, Ladd RT. (1990) Oral communication apprehension in beginning accounting majors: An exploratory study. *Issues in Accounting Education*. 5: 180-194.

18. Khan TM, Ejaz MA, Azmi S. (2009) Evaluation of Communication Apprehension among First year and Final year Pharmacy Undergraduates. *Journal of Clinical and Diagnostic Research*. 3 : 1885-1890.
19. Berger BA, McCroskey JC. (1982) Reducing communication apprehension in pharmacy students. *American Journal of Pharmaceutical Education*. 46: 132-136.
20. Berger BA, Baldwin HJ, McCroskey JC, Richmond VP. (1983) Communication apprehension in pharmacy students: A National Study. *American Journal of Pharmaceutical Education* 47: 95-102.
21. McCroskey JC, Ralph DC, Barrick JE. (1970) The effect of systematic desensitization on speech anxiety. *The Speech Teacher* 19(1): 32-36.
22. Azmi S, Wasif SG. (2011) Communication Apprehension among Malaysian Pharmacy Students: A Pilot Study. *Indian Journal of Pharmaceutical Education and Research*. 45(1): 8 - 14.