

# Students' Preferences for Teaching Methods and their Performances in Schools of Nursing, Nigeria

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## Abstract

**Background:** Suboptimal academic performance by the majority of students at higher educational level has been linked with ineffective teaching methods by teachers/lecturers. The aim of this study was to assess teaching methods, academic, and clinical performances among student nurses in schools of nursing, in North-west Nigeria.

**Methods:** The study adopted a mixed approach of a cross-sectional design. The sample comprises of 95 tutors, 31 clinical instructors, 698 students, and the final year students from five selected schools. An adapted questionnaire was used for data collection. Quantitative data were analyzed using descriptive and inferential statistic with the aid of IBM SPSS Version 20. The qualitative data were summarize using thematic content analysis.

**Results:** Lectures, demonstration, and discussion were the most frequently used methods of instruction in the schools. The average academic performances of students were credit (C). The academic performance of students in the final examination and Nursing Council Exam was "Pass". Most of the students obtained a C-grade in the clinical examination. The clinical performance rating of the students in both the school and the nursing Council was "Pass" grade. There was a Significant positive correlation between the academic performance of third year students and their clinical performance (<.05). Most students were satisfied with lecture teaching method because of its ability to ensure curriculum coverage.

**Conclusions:** Clinical performance of students increased with an increased academic performance. Students preferred lectures and demonstration as methods of instruction. The tutors should trained and motivated students to use students' centred Learning methods in the administration of their lessons.

**Keywords:** *Academic, Clinical, Method, Performance, Teaching.*

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## Introduction

Discrepancies in the academic performances of nursing students have been observed, although students may be of comparable abilities, learn in the same environment and follow the same syllabus, their academic performance may still vary. Aremu

and Sokan<sup>1</sup> describes poor academic performance as a performance that is adjudged by the examiner(s) as falling below an expected standard; bright students who fail to excel due to other factors, miss the opportunity to advance in education and to get employment.<sup>2</sup>

According to Kalivani,<sup>3</sup> nursing students need both theoretical knowledge and clinical skills to handle real life situations while caring for the patients and families. Dimkpa and Buloubomere<sup>4</sup> suggested a conducive environment to encourage the students to learn academically and clinically. In addition, the instructional strategies should focus on students' abilities and preferences.<sup>5</sup> Many methods of teaching exist in nursing education; suboptimal academic performance has largely been cited to be the result of ineffective teaching methods.<sup>5</sup>

Omisakin,<sup>6</sup> described tutors' roles that invariably affect the student academic and clinical performances. Eghbalibabadi and Ashouri,<sup>7</sup> based on a comparative study suggested simulation training as an effective teaching strategy to facilitate learning and for the development of students' clinical performance. Gupta<sup>8</sup> revealed that lecture method with the use of blackboard was the most used method of teaching and the method have moderate effect on how students perform academically.

The relationship between teaching methods, academic, and clinical performances of students' nurses has become an object of inquiry for researchers.<sup>9</sup> Theoretical knowledge may enhance the clinical performance. For instance in a correlational study, students who perform well in the classroom setting performed similarly well in the clinical setting.<sup>10</sup> However academic grade does not always reflect the competence of students in clinical setting because there are variables (external and internal) that significantly affect performance of student nurses.<sup>11</sup>

This increased complexity, rapidly changing and challenging atmosphere in nursing practice.<sup>12</sup>

Previous studies revealed that effective teaching and evaluating techniques promotes students' academic and clinical performances. The Nursing and Midwifery council of Nigeria (NMCN) has been consistently conducting professional pre-licensure examination for several decades. However, little has been done empirically in Nigeria to find out the assessment of teaching methods, and their impact on academic and clinical performances of student's nurses. Additionally, while a study found a satisfactory clinical placement among students nurses in another context,<sup>13</sup> the students' satisfaction with the various teaching methods has been giving limited attention. This study was to assess the teaching methods, students' performance, the relationship between the clinical and academic performances and students satisfaction with the teaching methods.

## **Method**

### **Study Design, setting and population**

This study adopt a mixed approach of a cross-sectional (correlational) design. The study population were all the 95 tutors, 31 clinical instructors, 698 students and the final year students that sat for the NMCN' Professional Examination for General Nurses in five selected School of Nursing, Northern Nigeria. At first, a random sampling was used to select three (3) states out of the seven (7) state (cluster). In these selected states, all the five (5) were used for the study. We purposively selected 28 students from each school; 14 participants each from 2nd year and 3rd year classes respectively. Each focus group consists of seven (7) discussants. Therefore, the sample size across the five (5) schools was 140 participants/discussants. A total of 73 tutors participated in the study.

### **Instrument for data collection**

This study used a questionnaire, Focused Group Discussion Guide (FOGDIG), and Checklist for Assessment of Academic and Clinical Performance (CAP). The questionnaire was adapted from Questionnaire for the assessment of teaching methods and evaluation techniques and it has two sections. Section A has five items assessing sociodemographic characteristics; section B also has five (5) items focusing on the teaching methods used by the tutors. The focus group discussion contains 4 items to explore satisfaction with teaching methods. Finally, two different checklists were prepared each for 2nd year and 3rd year students to collect data on academic and clinical performances of students.

A pre-test was conducted in a School of Nursing in other state not participating in the main study. A Split Half reliability method from data collected (among 11 participants) shows a Cronbach's Alpha of 0.83 for the questionnaire. The Focus Group Discussion Guide (FOGDIG) was pre-tested using two FGDs groups comprising of 7 participants in each group in a different school. There was consistency in the responses recorded in the two sessions. Five (5) experts in the fields of nursing education and general education validate the content of the three instruments used in the study.

### **Data collection**

After obtaining ethical clearance and permission was sought from the heads of institutions and the respondents who agreed to participate. Two research assistants were trained for data collection. The

questionnaire was administered to tutors and the students had a Focused Group Discussions (FGDs) using FOGDIG. Four (4) FGDs were conducted in each school (two in each of the 2nd and 3rd year classes). Each session convened with a group of seven (7) discussants lasting over a period of 20-30 minutes. The FGD was recorded in an audiotape with the permission of the discussants. Finally, the previous exam records from the schools was collected and content analysed using Checklist for Assessment of Academic and Clinical Performance (CAP).

### **Data Analysis**

Data on the socio-demography was summarized using descriptive statistics (frequency, percentage, mean and standard deviation). Descriptive statistics were used to examine teaching methods and academic and clinical performances (means/standard deviation). The inferential component of the analysis was Person's correlation. The focus group discussion was analysed using thematic content analysis and the data were presented in form of themes. Each theme was presented with subthemes and participants verbatim quotations.

## **Result**

### **Sociodemographic characteristic**

The mean age of the tutors (in Table 1) was 36.4921 years, majority were males (74.6%), having BNSc/ BSc/B.Ed/HND (58.7%) as the highest qualification. The students had a mean age of 19.2 years; majority (69%) were females; and most (37.1%) were in the 3rd year of study.

**Table 1. Sociodemographic Data of Tutors**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Mean</b>
<b>TUTORS</b>			
Age			36.49
<b>Gender</b>			
Female	47	74.6	
Male	16	25.4	
<b>Qualifications</b>			
Postgraduate degree	5	7.9	
Bachelor/Equivalent	8	12.7	
Post-basic Nursing	37	58.7	
RN/RM	12	19.0	
<b>OTHERS</b>	1	1.6	
<b>STUDENTS</b>			
Age			19.2
<b>Gender</b>			
Male	241	31	
Female	511	69	
<b>Level of Study</b>			
Second year	217	28.9	
Third year	279	37.1	
Last set of NMCN Examination	256	34	

### Teaching Methods

As in Table 2, the most frequently used method of instruction was lecture method (98.4%). Other most adopted teaching instructions were clinical demonstration (80.9) and discussion (76.2%).

**Table 2: Teaching Methods**

Methods	Frequency	Percent
Lecture	62	98.40
Discussion	48	76.20
Demonstration	51	80.90
Simulation	28	44.40
Role play	23	36.50
Computer based learning	21	33.30
Lineup method	16	25.40
Case study	13	20.60
Buzz method	15	23.80
Debates	10	15.90
Concept mapping	8	12.70

**Academic performance of students**

In both levels, only a few had A grade in some courses. For the final year examination (first attempt),

Table 3 shows that 73% had Pass grade in Paper I and 90.9% in Paper II; in the NMCN professional examination, Table 3 also Indicates that 96% of students had pass grade in paper I and 97.2% in Paper II.

**Table 3: Academic Performance in School Final Examination and NMCN Professional Examination**

Grade	School Final Exam				NMCN Professional exam			
	Paper I		Paper II		Paper I		Paper II	
	F	%	F	%	F	%	F	%
PASS	184	73	229	90.9	242	96	245	97.2
FAIL	68	27	23	9.1	10	4	7	2.8
Total	252	100	252	100	252	82.1	252	100

### Clinical performance of students

The findings (in Table 4.1) concerning clinical performance indicated that larger proportions of the students (64.1%) and (44.1%) had C-grade in the 2nd and 3rd year clinical performance rating respectively.

For the final examinations, Table 4.2 revealed that most of the candidates (89% and 99.6%) had Pass grade in the clinical performance rating for the school final examination and NMCN professional examination respectively.

**Table 4: Clinical Performance**

Grade	2nd Year		3rd Year	
	Frequency	Percent	Frequency	Percent
A	0	0	1	0.4
B	0	0	39	14
C	139	64.1	123	44.1
D	38	17.5	56	20.1
F	40	18.4	60	21.4
Total	217	100	279	100

**Table 5: Clinical Performance in School Final Examination and NMCN Professional Examination**

Grade	School Final Exam		NMCN Professional exam	
	Frequency	Percent	Frequency	Percent
PASS	247	98	251	99.6
FAIL	5	2	1	0.4
Total	252	100	252	100

Relationship between academic and clinical performances of students

From the Table 5, correlation analysis revealed a strong positive correlation ( $r=0.68003143$ ) between student's academic performance and their clinical

performance in the 2<sup>nd</sup> year of training while, a moderate positive correlation was found in the 3<sup>rd</sup> year ( $r=0.571842$ ). Thus, academic performance is likely to increase clinical performance of students in the both levels of training.

**Table 6: Correlation between overall academic Performances and clinical performance among students**

Year 2 Students	Academic performance	Clinical Performance		
Academic performance	1			
Clinical Performance	0.68003143*	1		

**Final year Students**

	Academic Performance	Clinical Performance		
Academic performance	1			
Clinical Performance	0.571842*	1		

*\*Correlation is significant at 0.05 level.*

**Students’ preference for teaching methods**

Findings suggest that most students preferred lecture teaching method because of its ability to ensure curriculum coverage as stated by FDG 8 and FGD 10:

“In this our school we are more satisfied with the lecture than other teaching methods in our subjects. The lecturers that used lecture method do covers their topic and subjects or courses more than others using different method. So the coverage is good” (FGD 8).

“Sincerely speaking the lecture method we are very satisfied with it. is giving us the opportunity to understand the lecture, ask questions, observes the area the lecturer is paying emphasis and can sometimes predict where the teacher can ask questions. We are very satisfied with it” (FGD 10).

In the area of clinical teaching, majority of the students preferred lecture-demonstration method as the best suitable teaching techniques for teaching

clinical skills in the schools and clinical areas. FGD 5 and FGD 17 shared their experiences:

“We preferred lecture in the class before going to the lab for demonstration and then the clinical area. The teacher will do it and asked the class members to do it and if there are mistakes he will repeat it” (FGD 17).

“I like the lectures and demonstration together; you will received lecture and start demonstration immediately. If you forget the theory you can remember the demonstration. The two system is the best. I preferred it than any other method” FGD 5).

**Discussion**

Lectures, demonstration, and discussion were the most frequently used methods of instruction in the schools. The next most popular teaching technique were demonstration and discussion. The present study is in line with Nicole<sup>14</sup> who found that traditional lecture and group activity were the teaching methods used in nursing college.

The average academic performance of students in second and third year was credit (C). However, most of the students in the final year examination obtain a 'Pass' score. Most of the students in second and third year obtained a C-grade in the clinical examination. The clinical performance rating of the students in both the school final exam and NMCN professional examination was "Pass" grade. There was a significant positive correlation between the academic performance of students and their clinical performance. The present findings were supported by previous studies.<sup>15,16</sup> The findings may suggest that increase in academic performance may result in increased clinical performance.

For academic teaching, students prefer lecture method. However, the respondents opted for a combination of lecture and demonstration for clinical teaching. The students were satisfied with lecture teaching. This may not be surprising because lecture method (blended with e-learning) is the most common teaching method used in Nigeria as indicated by the tutors. This supports Sadeghi, Sedaghat and Ahmadi<sup>17</sup> who reported that the blended method is effective in increasing the students' learning rate.

This study found lecture-demonstration method of clinical teaching a novelty because previous study<sup>18</sup> reported students' satisfaction with demonstration method only as against the current study. A model demonstration of a simulation scenario can be used to develop clinical judgment and possibly self-confidence of nursing students.

### **Conclusion**

Lecture, demonstration and discussion methods were the most predominantly used method of teaching in schools of Nursing. The majority of the students passed their examinations with "C" grade which is average/pass. Academic performance is likely to increase clinical performance of students in the both

levels of training. Finally, most students were satisfied with lecture teaching method because of its ability to ensure curriculum coverage. The study implies that tutors should use students' Centred Learning methods in the administration of their lessons. The NMCN should tailor the General Nursing curriculum around students' Centred learning methods that actively involve students in their academic and clinical training.

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