

Perception of Nursing Students in Ondo State of Nigeria Towards Some Selected Courses in Human Anatomy

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Abstract

Introduction: One of the first and most fundamental medical sciences taught in medical school is anatomy. It provides the essential framework for the study of other fundamental sciences and clinically focused courses. The study was conducted to determine the perception of nursing students towards selected courses in anatomy.

Material and Methods: Nursing students in University of Medical Sciences and Achievers University, Ondo State of Nigeria who are offering anatomy (gross) and Histology courses were selected for the study. The total number of subjects that participated in the study was 105. The study made use of the google online form (questionnaire). The questionnaire was converted into an online google form and the link was sent to the targeted study population's social medial platforms for responses. Data obtained were analyzed using Statistical Package for Social Sciences (SPSS, version 25). Results were presented using percentage frequency distribution and a Chi-square test was also employed.

Result: Results revealed that the majority of the nursing students were very excited on their first visit to the gross laboratory, 36(33.3%) therefore this excitement in the gross laboratory and practical classes increased their interests and knowledge of anatomy, 48(45.7%). As regards, if there should be no dissection class in gross, the majority of the nursing students disagreed with this point, 41(39.0%) but complained that though dissection was interesting but was difficult to locate structures, 18(17.1%), and likewise majority were not in support of preservation via means of formalin, 57(54.3%).

Conclusion: It is recommended that a course on formalin be introduced to the students early enough to ensure the development of a coping mechanism as well as another alternative method such as plastinated models is recommended to complement dissection.

Keywords: Perception; Attitude; Nursing science; Human Anatomy; Nigeria

Introduction

Among the first and most fundamental medical sciences taught in medical school is anatomy. Human anatomy is a branch of biology that focuses on identifying and describing the physical characteristics of living organisms [1].

It provides the essential framework for the study of other fundamental sciences and clinically focused courses [2]. Therefore, a thorough understanding of anatomy is essential for critical medical skills such as obtaining a clinical history, performing an examination, and using clinical reasoning to arrive at a proper diagnosis and manage a patient [3]. Therefore, a thorough understanding of anatomy as a nurse is necessary for a responsible and efficient medical practice [4].

However, some nursing students disagree that microscopic anatomy and dissection being the most effective ways to teach and learn anatomy [5]. They do so because of unpleasant smells, nausea, and irritability as well as psychological issues such as stress, melancholy, and emotional trauma [6].

Evidence suggests that nursing students worldwide and at South African nursing education institutes have an important failure rate in anatomy [7-9]. Due to this, student nurses take longer to finish the course as a result of this, they are unable to achieve the minimum marks needed to move forward in the course sequence. Additionally, a high failure rate results in a high dropout rate for student nurses since they stop taking the course before it is finished [10]. This study is however designed to investigate the perception and attitude of nursing students in Ondo State of Nigeria toward some selected courses in Anatomy such as gross anatomy and histology.

Materials and Methods

Nursing students in University of Medical Science and Achievers University, Ondo State of Nigeria who are offering anatomy (gross) and Histology were selected for the study. The total number of subjects that participated in the study was 105. Year two and three students were included in this study.

The data collection tool was a structured questionnaire made up of 11 Likert-style items regarding nursing students' percep-

tions towards gross anatomy and Histology cadaveric dissection.

The online Google form questionnaire had four sections. The first section was made up of the demographic characteristics of the subjects for the study (Gender, Level, age, and Religion). The items were closed-ended and addressed three broad areas with five items evaluating perceptions towards gross anatomy (dissection) (second section), three items evaluating perception towards Histology (third section), three on acceptability between gross anatomy (dissection) and Histology (practical Histology) (fourth section).

The questionnaire was converted into an online Google form and the link was sent to the targeted study population's social medial platforms for responses. Reminders were sent periodically to participants and after two weeks a total of 500 responses were received.

Data obtained were analyzed using Statistical Package for Social Sciences (SPSS, version 25). Results were presented using percentage frequency distribution and a Chi-square test was also employed.

Results

Most of the subjects in this present study were between the ages of 18-23 (94.3%), followed by 24-29(5.7%) but none was recorded for ages 30-35. Majority of the nursing students that attempted the questionnaire were females, 90(85.7%) while males were 15(14.3%) that is to say females participated more in the study compared to the males. A large percentage of participants were Christians, 95(90.5%), followed by 9(8.6%) while 1(1.0%) was not consistent with their religion (**Table 1**).

Table 2 displays nursing students' opinions toward gross anatomy (dissection). Results revealed that the majority of the nursing students were very excited on their first visit to the gross laboratory, 36(33.3%) therefore this excitement in the gross laboratory and practical classes increased their knowledge of anatomy, 48(45.7%). As regards, if there should be no dissection class in gross, the majority of the nursing students disagreed with this point, 41(39.0%) but complained that though dissection was interesting but was difficult to locate structures,

Table 2: Perception of nursing students towards gross anatomy (dissection).

Variable	SA f(%)	A f(%)	N f(%)	D f(%)	SD f(%)
My first visit was exciting	36(33.3)	32(30.5)	28(26.7)	2(1.9)	8(7.6)
Dissection helped increase my understanding of anatomy	48(45.7)	39(37.1)	12(11.4)	1(1.0)	5(4.8)
There should be no dissection in gross anatomy	7(6.7)	7(6.7)	11(10.5)	41(39.0)	39(37.1)
It was difficult locating structures	18(17.1)	4(4.8)	21(20.0)	16(15.2)	3(2.9)
I do not like the smell of formalin	57(54.3)	40(38.1)	6(5.7)	2(1.9)	2(1.9)

Table 3: Perception of nursing students towards histology.

Variable	SA f(%)	A f(%)	N f(%)	D f(%)	SD f(%)
It is boring viewing micrographs	11(10.5)	15(14.3)	33(31.4)	38(36.2)	8(7.6)
Histology should be removed from our curriculum	10(9.5)	8(7.6)	10(9.5)	58(55.2)	19(18.1)
Histology is one of my favorite courses	11(10.5)	28(26.7)	43(41.0)	15(14.3)	8(7.6)

Table 1: Demographic characteristics of study participants.

Variables	Frequency	Percentage (%)
Gender		
Male	15	14.3
Female	90	85.7
Level		
200	73	69.5
300	32	30.5
Age (years)		
18-23	99	94.3
24-29	6	5.7
30-35	0	0
Religion		
Christian	95	90.5
Muslim	9	8.6
Others	1	1

18(17.1%) and likewise majority were not in support of making use of formalin, 57(54.3%).

Table 3 displays how nursing students feel toward histology. Findings indicated that the majority of the students were very satisfied viewing micrographs, 38(36.2%) and as such do not want histology to be removed from their nursing curriculum 58(55.2%). Most of the students were not decisive on whether histology was one of their favorite courses in anatomy, 43(41.0%) only a few, 28(26.7%) opined histology being among their favorite courses in anatomy.

Table 4 shows the acceptability between gross anatomy (dissection) and Histology (practical histology) by nursing students. From the results, the vast majority of students still prefer histology to gross anatomy, 30(28.6%) but notwithstanding, more time ought not to be added to their histology practical classes 43(41.0%). It was also agreed by the students studying nursing that both courses (gross anatomy and histology) shouldn't be removed from their nursing curriculum as they were very okay with the courses.

Table 4: Acceptability between gross anatomy (dissection) and Histology (practical histology) by nursing students.

Variable	SA f(%)	A f(%)	N f(%)	D f(%)	SD f(%)
I prefer gross anatomy to Histology	17(1.2)	19(18.1)	23(21.9)	30(28.6)	16(15.2)
More time should be attached to Histology practical than gross practical	11(10.5)	11(10.5)	28(26.7)	43(41.0)	12(11.4)
Both courses should be removed from the nursing curriculum	13(12.4)	6(5.7)	13(12.4)	52(49.5)	21(20.0)

Discussion

The students were obstinate that dissection inside the gross anatomy laboratory improved their comprehension of anatomy and helped them remember what they had learned in class. On their initial visit to the gross anatomy laboratory, the majority of the nursing students were enthusiastic, which helped them feel at ease with the course.

However, they ran into problems trying to recognize the structures. The students' positive opinions are consistent with those presented in research by Sharma and Gupta. 11 The vast majority of students (>75%) in a study conducted in Australia agreed with all the survey instrument items that represented good opinions of cadaveric dissections, according to Dissabandara et al [3].

The present research supported a study performed by Izunya et al [12]. Approximately 90% among the students acknowledged the value of dissection in learning anatomy. The vast majority of students found viewing micrographs to be highly satisfying, and because of this, they do not want histology to be dropped from their nursing curriculum. Additionally, the majority of students were undecided as to whether histology was one of their favorite anatomy courses, and only a small percentage agreed.

However, most of the students voiced their displeasure over the formalin preservation method because it affected their eyes and noses. This result is consistent with findings from prior research [11]. Students participating in cadaveric dissection frequently encounter the symptoms of formaldehyde exposure, including a variety of eye and upper respiratory tract problems brought on by mucosal irritation. Therefore, it is imperative that anatomists and scientists find better ways to preserve cadavers that reduce these negative impacts [13].

The vast majority of students still preferred histology to gross anatomy but notwithstanding, additional time shouldn't be added to their histology practical classes. It was also agreed by the nursing students that both courses (gross anatomy and histology) ought not to be removed from their nursing curriculum as they were very okay with the courses. This is in support of a research by Dissabandara et al [3]. that found that only 36% of participants liked dissection above other learning methods. This demonstrates that, although while dissection is crucial, other cutting-edge learning methods must be permitted to support the training and education in anatomy [14]. This research has shown that nursing students have a very favorable opinion towards gross anatomy and histology as a course. The study noted difficulties including formaldehyde odor from preservatives and difficulty identifying structures. Even so, it is advised that medical schools use anatomy prosectors to help the students during dissections so that structures may be easily identified.

Conclusion

We suggest that cadaver dissection be an essential component

of nursing education, thus the department of anatomy needs to allot enough time for dissection and histology practical.

A formalin course should be given to students early enough to guarantee the creation of a coping technique. In addition to dissection, additional alternate methods including platinated models are advised.

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