



Journal of Anatomical Sciences

Email: anatomicaljournal@gmail.com

J Anat Sci 7 (1)

Short Communication

Advancing Anatomical Science and Education: The need to develop its branches in Nigeria

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ABSTRACT

A falling tree makes no noise in the forest when nobody is there to hear it; it's high time we spoke out for the overall development of our profession, Anatomy. For any person to come up with correct diagnose of a medical condition, he must have good knowledge of Anatomy. In as much as the roles of anatomical science and education in the nation building cannot be over emphasised and for anatomists to assume their rightful places/roles in nation building, all branches of anatomy must be given proper attention both at undergraduate and postgraduate level. Many young anatomists are outside there without job. Many of them do not know what they can do with their certificates. Some of them love Anatomy but they don't want to be teacher/lecturer. We need to begin to focus on producing scientists/biomedical scientists that will be relevant in other aspect of biomedical science and education. This presentation will focus on how Anatomy can be rebranded to take its rightful place in the nation building, especially in areas of medical/health science and education for the promotion of sound health care delivery for our growing population in Nigeria and Africa in general.

Keywords: Anatomy, Anatomical science/education, Africa, Medical/health, Nation, Nigeria

INTRODUCTION

Anatomy forms the basis of the practice of medicine. It leads the physician towards an understanding of a patient's disease whether he or she is carrying out a physical examination or using the most advanced imaging techniques.

Anatomy is important for dentists, chiropractors, physical therapists, and all other health care givers who are involved in any aspect of patient treatment beginning with analysis of clinical signs.

In fact, the ability to interpret a clinical observation correctly is therefore the endpoint of a sound anatomical understanding^(1,2).

WHAT IS ANATOMY?

Anatomy is a branch of biology that deals with the structure of the organisms⁽³⁾. It is the study of forms and structures of human body⁽⁴⁾. It is also defined as the

purposeful study and exploration of the human body to understand and appreciate its absolute nature and structure in the normal living condition in order to apply such knowledge to improve living conditions and solve problems in conditions of anomalies and diseases⁽⁵⁾.

THE BRANCHES OF ANATOMY

The branches of anatomy are so numerous and some having even developed than anatomy itself. Below are some of the branches in which anyone can pick interest for advancement of anatomical science and education⁽²⁾.

1. *Gross Anatomy:* An aspect of anatomy that deals with the study and teaching of gross structures (those structures that can be seen with on aided eyes).
2. Cell biology (Cyto/Histology):
3. Cyto/histochemistry

4. Embryology
5. Reproductive anatomy
6. Oral/Morbid anatomy
7. Clinical Anatomy
8. Radiological Anatomy
9. Forensic Anatomy
10. Anthropology
11. Surface anatomy
12. Comparative Anatomy
13. Neuroanatomy
14. Plastic Anatomy
15. Immunohistochemistry
16. Tissue culture
17. Cytogenetics
18. Prosthetics
19. Teratology
20. Molecular biology

WHAT CAN ANATOMISTS DO?

This is a very pertinent question that every anatomist face today either from junior colleagues or parents. While some of us try to provide answers to the above question, some even do not know what they are trained to do as anatomists. We are of the opinion that anatomists can be round pegs in the round holes as;

1. Consultants
2. Emergency health officers
3. Basic and clinical researchers
4. Research/Health planning officers
5. Health information management officer
6. Clinical embryologists in fertility centers
7. Scientific officers (SO) (MDAs)
8. Forensic analysts
9. Prosecutors in gross anatomy laboratories
10. Laboratory scientists in other anatomy laboratories
11. Anatomy educationists
12. Teachers of anatomy

CHALLENGES FACING THE DEVELOPMENT OF ANATOMICAL SCIENCES AND EDUCATION

Despite the fact that anatomy is one of the oldest pillars of human study or medicine in today's world, it's still being faced with challenges from all angles. Below are some of this challenges that need urgent attentions if we would progress as anatomists in the 21st century;

1. Lack of interest in anatomy as a course of study by those students
2. Lack of clear cut policies about the professional roles of anatomists in the health and other relevant sectors⁽⁶⁾.
3. Poor career recognition
4. Poor standard of professional training
5. Poor laboratory training
6. Lack of motivation/mentorship
7. Health sector rivalry

WHAT CAN WE DO TO DEVELOP?

1. Man power development
2. Postgraduate/research training
3. Networking/collaboration
4. Development of certification program
5. Increase internal generated revenue
6. Review of mode of admission in anatomy
7. Equip Laboratories
8. Diversification
9. Anatomy policy review
10. Students empowerment
11. Increase laboratory involvement of our students (B.Sc./Tech. and M.Sc.).
12. Anatomy week celebration/ advocacy program.

CONCLUSION

Just as your old age life depends much on how successful your children are in life so it is if Anatomy as a field of discipline will develop to meet the evolutionary dynamics of science in the 21st century, all its branches must be given proper attention. And if we must achieve this we would need curriculum and attitudinal changes, and collaboration from all and sundry. Government need to as a matter of fact encourage us by given us conducive conditions and an appropriate policy for effective operation and carrier development.

REFERENCES

1. Adeniyi P. A. and Shallie P. D. *Advancing Anatomical Science and Education: The need to develop its branches*, 12th Annual Scientific conference/AGM of Anatomical Society of Nigeria (ASN) held at University of Benin, Benin city, Nigeria; 2015.
2. Drake R. L, Vogl W, Mitchell A. W. *Gray's Anatomy for students* (1st Ed.), Elsevier, London, UK, 2005;2.
3. Ekanem T. B. and Eluwa M. A. *A textbook of the history of Anatomy* (1st Ed.), Distinctive Printers, Umuahia, Nigeria, 2006; 1–8.
4. Ihunwo A. O. The diiscipline of Anatomy: prospects for a viable future in Nigeria, *J. Anat. Sci.* 2012; 3(1): 14–18.
5. Owolabi J. O. *Introducing Anatomy, A text health Sciences students*, Ace publishers, Nigeria, 2011; 7–20.
6. Tijani A.A. *Repositioning Anatomy In Nigeria: A Road Map*, Lecture delivered at LAUTECH ASSON week, 2013.