



Short report
Cadavaric and Anatomical Specimen Supply In Medical Schools of Southeastern Nigeria.

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ABSTRACT

Sources of anatomical specimens were reviewed for the past three decades (1970-2000). Old technicians and technologists who had worked in the Departments of Anatomy in the medical schools in Southeastern Nigeria were interviewed. Classifications of different categories of the gross, embryology, and histology specimens, were done as well as their sources. Result show that Government Security Outfits were the sources of most of the cadavers used for dissection. Bones were recovered from dissected and spoilt cadavers. This information could be of help to new medical schools in Eastern Nigeria on how to source their anatomical specimen.

KEY WORDS: Anatomical specimens, Cadavers, Bones, Eastern Nigeria.

Anatomical specimens are the materials used in the study of different aspects of the Anatomy. These aspects include gross anatomy dissection, embryology and histology. Cadavers have been the main specimen dissected by ancient anatomists, and still remains the method of teaching practical anatomy.

Preliminary observation shows that cadavers have been supplied from many sources in medical schools in Southeastern Nigeria. This paper presents information gathered on sources of anatomical specimens in the medical schools.

Table 1 show that unclaimed diseased prisoners at times serve as sources of cadavers used for dissection but most of the cadavers were unclaimed bodies sourced from Government Security outfits, including those who died on account of accidents. Unclaimed severely diseased and mutilated bodies were always rejected. Information gathered from technologists in the medical schools show that sourcing anatomical specimens especially cadavers have been difficult. As a result the already established medical schools like the University of Nigeria Teaching Hospital (UNTH),

the first medical school to be established in the Southeastern region has been the major distributing source of cadavers for the other new institutions. With the establishment of teaching hospitals in the new medical schools, cadaver procurement became sourced by the teaching hospitals.

Bones were recovered from the dissected cadavers by scrapping off the dissected soft tissues, boiling and treating the bones with chemicals. Alternatively, bones were obtained by burying the cadavers in shallow graves and recovering them three to six months after which they were cleaned up and treated with chemicals, before using them for academic purpose. After boiling the bones, they were treated with anti-fungal agents and then bleached with solution of hypochlorous acid in order to remove bloodstains and other tissues.

Artificial skeletons; anatomy models of different regions of the body are sourced from scientific materials shops. Also from the Obstetric and Gynecology Departments of the Teaching Hospitals, different aborted specimens as well as specimen obtained during surgery in cases of stillbirths were obtained for the same purpose.

Table 1: Sources Of Anatomical Specimens In Eastern Nigeria

| TYPE | CAUSES OF DEATH | SOURCES | REMARK |
|-------------------------|------------------------|--------------------------------|-----------|
| 1. Cadavers | i. Diseased bodies | Govt. prison staff (15%) | Unclaimed |
| | ii. Traumatized bodies | Govt. security out-fit (65%) | |
| | iii. "Insane" bodies | Govt. security out-fit (5%) | Unclaimed |
| | iv. Accident cases | Govt. security Establish (15%) | Unclaimed |
| 2. Bones | Any of the Above | Any of the Above | |
| (a) Natural | " | (i). Buried & recovered (35%) | |
| (b) Artificial | " | ii. Dissected wholly (60%) | |
| | - | iii. purchased from shops (5%) | |
| 3. Embryology specimens | i). Abortion | O/G Depts. | |
| | ii. Stillbirths | - By aspiration, biopsy etc | |

The diseased bodies are not the best bodies for dissection since ethiopathogenic processes render them useless for demonstrative purpose during dissection. This applies also to those involved in accidents. Such cases lose their structures hence those structures cannot be demonstrated to students.

Athwale (1963) showed that sources of natural bones were easily handled since both mutilated and dissected bodies were easily available after short period of time of undergoing due processes. Artificial bones and models are not the best for anatomical studies since most of them are fragile and do not last.

Visiting the Teaching Hospitals, the Obstetrics and Gynecology Departments, could help in securing specimen for embryological studies. Most of the bodies sourced from other anatomy institutions or hospitals are usually in good condition, having been

embalmed by the respective staff of the institution or locally (Ezegworie 2002).

Some medical schools in Britain and United States of America have resorted to "read Anatomy on your own without dissection". This may be due to the problems involved in sourcing cadavers.

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