

Special Edition
**"Anthropological Indices: A
 Holistic Approach to Forensic
 and Medical Investigation"**

Editorial

*Corresponding author

Jervas Ekezie, PhD

Senior Lecturer

Department of Anatomy

School of Basic Medical Sciences

Federal University of Technology

P.M.B 1526 Owerri, Nigeria

Tel. +234 806 5430037

E-mail: ekeziejervas@gmail.com

Special Edition 2

Article Ref. #: 1000ANTPOJSE2e001

Article History

Received: June 18th, 2016

Accepted: June 30th, 2016

Published: June 30th, 2016

Citation

Ekezie J. Anthropological indices: a holistic approach for medical and forensic. *Anthropol Open J.* 2016; SE(2): Se1-Se2. doi: [10.17140/ANTPOJ-SE-2-e001](https://doi.org/10.17140/ANTPOJ-SE-2-e001)

Copyright

©2016 Ekezie J. This is an open access article distributed under the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Anthropological Indices: A Holistic Approach for Medical and Forensic

Jervas Ekezie, PhD*

Department of Anatomy, School of Basic Medical Sciences, Federal University of Technology, Owerri, Nigeria

I was just thinking, what I will offer to ANTPOJ aside from article submission. This thinking coincided with the request of the Editorial Assistant of ANTPOJ when she asked that I suggest a title for the next issue. I had to think out of the box/envelope to generate a stimulating topic "Anthropological indices: A holistic approach for medical and forensic".

Of course, we know that Anthropology is a field that that has the following branches:

1. Social-cultural Anthropology
2. Physical (Biological) Anthropology
3. Archaeological Anthropology
4. Linguistic Anthropology
5. Applied Anthropology, etc.

Human beings by evolutionary trend occupy the earth; their activities have influence on the earth and the environment in which they live also affects them.

The mother earth produces the food which we eat, such products affects our being. Nutritional Anthropology comes into play to check the changes the food we eat have on our body over time.

The influence and history of man on earth overtime can be checked through Paleoanthropology (the study of the origins and predecessors of the present human species, using fossils and other remains). This takes a look at the formation and the development of the specific characteristics of humans (hominization) and the reconstruction of evolutionary kinship lines in the family Hominidae, by means of the study of fossils, such as petrified skeletal remains, bone fragments, footprints and associated evidence, stone tools, artifacts, and settlement localities.

Anthropological indices for example "anthropometrics" are being employed by Health Professionals (Medicals) to check secular trends, and nutritional status in a given population.

Cephalometric dimensions find its usefulness in maxillo-facial surgery to achieve the desired surgical procedure after head injuries/trauma.

In Prosthetics and Orthotics, Anthropometric dimensions are useful in the production of the desired prostheses and orthoses for individual with lower or upper extremities' disabilities. In Pediatrics: they are important tool employed to correct and manage infants with orthotic problems; and in pregnancy to check the levels of foetal development (*via* biparietal dimension, cephalic index, crump length and rump length) to mention just but a few.

In public health, obesity is seen as a worldwide problem due to the risks (hypertension, diabetics, infertility, stigma, cancer, etc.) associated with it. The levels of obesity/overweight (adiposity) cannot be determined without simple anthropometric measurement like weight (kg), body height (cm), neck circumference, waist circumference, hip circumference, abdominal circumference, thigh circumference, waist to hip ratio etc. These anthropometric

measurements and their indices are useful tools employed by medical practitioners and other allied health professionals to check and control obesity, overweight, and underweight and to proffer appropriate medical advice and control to the affected individual and society at large. Some of these you can see, if you go through my articles on: Thigh circumference; An index for accessing cardiovascular disease risk in the Igbos of Nigeria; Anthropometric study on the effect of social scale on adiposity and blood pressure of married Igbo women in Nigeria; Impact of urbanization on obesity, anthropometric profile and blood pressure in the Igbos of Nigeria; The Effect of marital status and self-reported physical exercise on the adiposity and blood pressure of the Igbos of Nigeria; Spousal similarities and differences in physical and cultural traits among the Igbo ethnic group in Nigeria, etc.

Anthropologists will not fulfill their ambition and contribution to our existence without studying racial/ethnic differences; such differences can be captured by generating indices like Cephalic Index (CI), Nasal Index (NI), Interanthal Index (II), Foot Index, Hand dimension etc. These indices can also be used in the same population to check secular trends. Through osteometric and Somatometric measurements, Mathematical models are generated for stature reconstruction, which eventually help in the proper fixation of an individual during crime investigations. Such generated formulas can be seen on our work on stature estimations of the Igbos, Nigeria and other related articles from eminent scientists.

In forensics, Anthropological indices may be employed by the jury and law enforcement agencies in differentiating the sex of victim, the height, age, and race, i.e. the big fours of Forensic Anthropology.

Dermatoglyphics which is the study of the ridge pattern of the skin is also employed to differentiate people by sex, race and even age. The ridge pattern of the skin has provided a clue for the occurrences of some disease in the population. Dermatoglyphics is therefore a variational tool in crime investigation because it is unique for a given person in a given population.

You will be reading a comparative study on the digital dermatoglyphics and palmar ridge count of Igbo and Okrika ethnic groups of Nigeria using Hp Scanjet G3110, shortly in this edition.

I would conclude by saying that ANTPOJ has done well to launch this Journal "ANTPOJ"; it has a wide scope, therefore scientists all over the world are welcome to submit their manuscripts for wider readability and criticisms since ANTPOJ has an open access.