

13th International Conference on Human Genetics and Genetic Diseases

April 25th, 2023 | Webinar

ISSN: 2161-0436

Genome Editing And Human Genetic Diseases: New Possibilities And Challenges Related To Healthcare For Africa

Abstract:

Currently, medical practice and approaches to healthcare delivery in Sub-Saharan Africa are increasingly obsolete and harmful to the vulnerable population afflicted with high disease burden. This requires new strategies and approaches to redress the situation and of putting plans into practice for integrating the often neglected genetic component and impact on our health and risk factors for diseases. The genetic basis of human diseases and disorders is poorly understood as human genetics and genomic medicine remain domains of study which are largely unexplored, under-researched, and under-funded in Africa. Meanwhile, developments in genome editing technologies and new scientific innovations offer new knowledge to advance the economic, health and political agendas, and approaches that can be used to reform medicine and transform healthcare delivery in Africa. Despite the advances, there is a huge persistent knowledge gap in understanding the connection between genetics, diseases and environmental factors, and how genes impact human health and risk to our lives. Further, much data is acquired from the mapping of the human genome on the genetic origins and cause of diseases, and evidence indicating that some monogenic diseases are cured using genome editing, but gene editing technologies are not yet applied to treat the genetic causes of diseases that run in families in Africa. Still, genetic diseases are life-threatening and leading causes of death, but not much is done to incorporate these components into medical practice and in healthcare delivery to improve health span, lifespan, and wellbeing in Africa. Most existing genetic data used in research is overwhelmingly from white people and the benefits of genomic medicine remain restricted to high-income countries. I address the knowledge gap and disparity in access to genomic medicine, and argue for a paradigm shift in the one size fits all approach to healthcare towards incorporation of precision medicine in Sub-Saharan Africa.

Biography:

Andoh Cletus tandoh is a bioethicist and philosopher, lecturing Applied Ethics, Bioethics and other specialties in Philosophy at the University of Yaounde I, Cameroon, and founding president of the Cameroon Society for the Advancement of Bioethics. His primary research interest is on the ethical challenges of scientific research with human beings and he has published several articles around this theme within the context of Africa. In 2017, he organized the international African conference on: Human Genome Editing. Science, Ethics and Policy, Yaounde, Cameroon. And in June, 8-10, 2020: Genome Editing, Human Genetic Disorders and Knowledge Development in Sub-Saharan Africa., Yaounde, Cameroon. He was a visiting scholar at the Europäische Akademie, Bad Neuenahr-Ahrweiler, Germany between 2007-2008, where he worked on his research project entitled "The Ethical Dimensions of Technological Progress: An African Perspective". He was also the Global Bioethics Education Initiative Scholar in 2011, the Centre for Bioethics and Human Dignity (USA). He serves as an Expert in the UNESCO Ethics Expert Panel of the Human Varium Project and its Bioethics Working Group. From 2018-2019, he was guest scientist at the Institute for Medical Ethics and History of Medicine, University of Gottingen, Germany, where he worked on the topic "Human Genome Editing: Possibilities and Challenges Related to Healthcare in Africa".

catandoh@gmail.com



Andoh Cletus Tandoh
University of Yaounde I, Cameroon

Received: 08 December 2022 | **Accepted:** 15 December 2022 | **Published:** 05 May 2023