

Chemo-Preventive Agents from Nigerian Plants are Likely Means of Preventing Cancer... Dr. Iweala

Dr. Emeka Iweala is a biochemist with a strong curiosity about cancer chemo prevention. His research interests include drug-nutrients interactions in animals and the potential use of local plants in complementary and alternative medicine.

Dr. Iweala has been working at understanding the causes and possible prevention or treatment of cancer, and in the course of that study, he discovered some indigenous plants that can offer protection and prevention against cancer by virtue of the constituents that these plants contain.

According to him, "Nigerian plants have been known to have many bioactive compounds, which have the potential to prevent cancer. Some of these plants like *Gongronema latifolium* (Amaranth globe), *Gnetum africana* (African Jointfir), *Telfaria occidentalis* (Fluted pumpkin) and *Ocimum gratissimum* (African basil), have all shown potentials to prevent cancer. These are all common vegetables that we consume on daily basis."



The researcher stated that the growing incidence of cancer in Nigeria and the seeming lack of cure for the disease motivated him to embark on finding a lasting solution to the problem. "I felt with the plethora of leaves and herbs in our nation, we must have what it takes to actually prevent or be able to manage the disease," he added.

He noted that cancer is a complex disease and finding a cure has been challenging thus far, and presently, his research team is exploring the possibility of preventive measures, because if there is a way to prevent its occurrence, the need for cure would reduce. He said, "I'm looking at a situation where we can achieve our aim of extracting and purifying cancer preventive phytochemicals from Nigerian plants, which we can formulate into supplements or herbal drinks that people can consume to prevent cancerous cells from thriving."

Dr. Iweala, by reason of his interest in cancer research, especially prostate cancer, has been involved in numerous collaborations within and outside Nigeria. He stated that the recently signed MoU between Covenant University and University of Florida has enabled him to collaborate with the Prostate Cancer Research Transatlantic Consortium (CaPTC) of the University of Florida Health Centre. Together, they are currently researching into various aspects of prostate cancer. "I also have collaboration with the Kunming Institute of Botany in China, where I was a visiting scholar fellow in 2013, studying chemo preventive properties of some Nigerian plants."

He noted that funding, training opportunities and lack of capacity are the greatest challenges of cancer research in Nigeria. According to him, "A consortium, the Health Disparities Education Awareness Research and Training (HDEART) working with CaPTC, provided me with a partial travel grant to attend a workshop on cancer in the United States of America. In addition, I also got another partial travel grant for a conference coming up later this year in Jamaica, with the focus being prostate cancer. Currently, I am preparing a proposal for the Management of Covenant University towards ensuring a more robust cancer research in the University. When that takes off, I believe we will be close to a major breakthrough in this area of medicine."

Dr. Iweala was a recipient of a United States Department of Defense (DoD) grant, which will come into effect in 2015. The grant is specifically to investigate prostate cancer; and he was nominated as a co-principal investigator for the research.

He solicited the active partnership of international agencies and experienced cancer researchers in the diaspora in building the capacity of budding researchers in this area of research, as that is the only way to improve on the results recorded thus far. Thus, they will learn new ways and techniques of carrying out cancer research.

He appreciated the Management of Covenant University for creating a platform that has been very encouraging towards engaging in effective research by faculty and staff, and by providing equipment and funding to carry out research. He said with the steps taken by the University's Management, within the next few years, there would be a discovery on indigenous chemo-preventive agents that can be applied in the prevention and protection against cancer.

Dr. Iweala belongs to two research clusters in the University, one of which is the "Biotechnology cluster," where he leads a sub-cluster on cancer prevention research; and is a member of the "Protein Sweeteners" research group; he is also a member of the Covenant University's "Public Health and Wellbeing," where he leads the "Non-Communicable Disease" sub-cluster.

He has published widely in public health nutrition, chemoprevention of diseases, and alternative medicine as it relates to medicinal plants, amongst others.

Visit <http://covenantuniversity.edu.ng/Profiles/Iweala-Emeka-Eze-Joshua> for more publications from Dr. Emeka Iweala