# Demystifying 5G and Allaying all Fears

**Opeyemi Praise** 

### Content

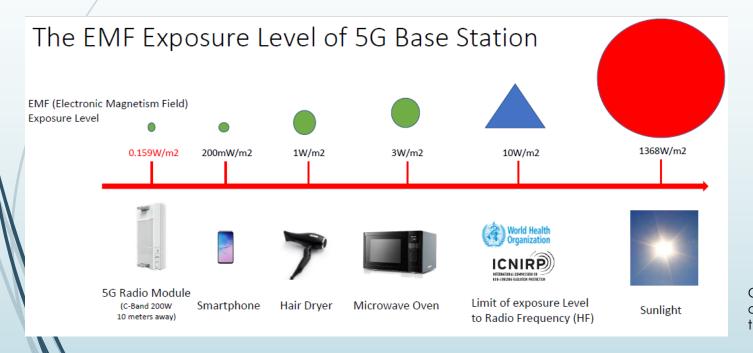
- **■** Why 5G is not harmful
- a. Radiations are all around us
- b. Levels of radiation are the big deal.
- c. Harmful Radiations.
- d. Non Ionizing Radiation
- 5G Conversation in Nigeria
- Safety Standards

#### Radiations are all around us

- Sun radiates EMR
- Cables carrying electricity in your house radiate EMR, your microwave oven, your Bluetooth, satellites in space, your light bulbs, wireless microphones, of course your hand-held devices
- In fact, every living human being radiate infrared energy.

# Levels of radiation are the big deal.

Some sources of radiation have low ability to generate high radiation anyways. So they do not serve as a threat. While some have good power and can radiate high power. The big deal, however, is high power radios beaming directly at human beings at a close range for a long time. Good enough, there is no such applications of radios except maybe X-rays.



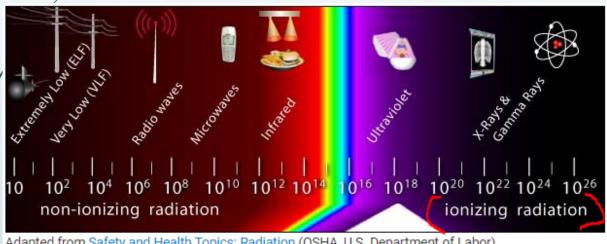
Culled from report "Clarification on 5G-coronavirus conspiracy theories"

#### Harmful Radiations

Very high radiations of any form can cause harm, but it is not specific to one technology such as 5G. So, regulations must be in place to control and manage radiations of any forms — from base stations to phones, to even your microwave oven. Regulation is key. Do you know oil companies (world-over and Nigeria inclusive) use equipment with nuclear radiations and a regulator in Nigeria regulate the radiation levels? So radiations of any form need regulations.

# **Non Ionizing Radiation**

- 5G can be deployed:
- 1. Radio Wave
- 2. Millimeter Wave
- On the spectrum scale, both are far from the ionizing radiation region.



Adapted from Safety and Health Topics: Radiation (OSHA, U.S. Department of Labor)

# 5G Conversation in Nigeria



#ChannelsTv

The Dangers of 5G Network To Living Things - Environmental Biologist

- This guy's argument is based on one fact, that 98% of millimeter wave is absorbed by atmospheric oxygen. Then he went straight to oxygen in hemoglobin? That 5G will affect oxygen in hemoglobin?
- what happens in vitro (in the atmosphere) does not necessarily translate to in vivo (human body) experience. 5G technology is ubiquitous and no significant health impact has been reported widely. My conclusion is that he is translating his environmental knowledge directly to the human body without evidence.

# Safety Standards

- Regulation ensures that these equipment are safe from the factory and also ensure safety after they are deployed. These standards are available for 2G, 3G, 4G, 5G and other technology types.
- The safety of any technology is a live process that does not have an end date. We must continue to monitor, analyze data and seek continuous improvement in the area of safety. As we have more and more data, we can optimize policies around safety.
- "To ensure maximum interoperability and affordability for consumers, the Type Approval standards set by the Nigerian Communications Commission are based on international standards from; The International Electrotechnical Commission (IEC) and its International Special Committee on Radio Interference (CISPR), The European Committee for Electrotechnical Standardization (CENELEC) and The European Telecommunications Standards Institute (ETSI)" culled from NCC.

# Thank You