**5G, Religion, and Misconceptions in the age of COVID-19 Pandemic in Nigeria**

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**Abstract**

5G wireless telecommunication was test-launched in Nigeria in 2019 with expectations to improve its digital economy and better communication. The outbreak of the COVID-19 led conspiracy theorists to link 5G to the virus. As with conspiracy theories, the “who” that lends a voice to it can add a new dimension to how far its flame can travel. Pastor Chris Oyakhilome, founder of Believers LoveWorld, added his voice to the 5G debate, claiming that the outbreak of COVID-19 in Nigeria was a decoy to sequester the population for government to covertly deploy 5G. The Nigerian government appealed for calm and stated categorically that they have not issued any license for the installation of the technology. Tech enthusiasts and media organizations put out fact-checking information in support of the technology and how it has always been the case whenever a new technology is about to be deployed. From the various arguments, no one really understands the full capabilities of the technology and its long-term effect on living organisms and the environment. It is recommended that more tests be carried out in varying conditions to understand the tolerance limit of the technology, and for the government to be transparent in its public communication.

Keywords: 5G, COVID-19, Nigeria, Religion, Pastor Chris, Public Health, Environment

**Introduction**

5G wireless communication was test run in Abuja, Nigeria in November 2019 by the largest telecommunications network in Nigeria, MTN Nigeria. It was the first 5G trial in West Africa; it followed a successful trial conducted by MTN South Africa in June 2018. The demonstration highlighted the deliverables of 5G wireless communication network which include swift automation and rapid immersive entertainment (Awojulugbe, 2020), it, however, failed to address salient issues such as Nigeria's readiness for a nationwide rollout especially due to its well documented epileptic power supply as well as questions on the safety of the technology to human, other living organism and the environment where the technology would be deployed. This paper argues about the need for full disclosure as regards the new technology in order to understand its capabilities and effects on living organisms and the environment. To achieve this, it is important to understand what has been documented, what is covered and the ramifications of the adoption of the technology in newspaper reports and literature on 5G.

Tracing back to the origins of wireless technology, Simkó and Mattsson (2019) informs that the first generation of hand-held mobile devices were available in a few countries for private and commercial use in the late ‘80’s. Successively, the second (2G), third (3G), and fourth (4G, LTE) generations were introduced with a greater rate of adoption and penetration with each release, such that, today, there are more mobile devices than inhabitants of the Earth. The newest addition to the technological evolution is the 5G network, and like the previous releases, skeptics have raised doubts about its safety on health and environment. In addition, 5G is considered the base technology for the Internet of Things (IoT).

Table 1: Subdivision of the 5G frequency spectrum.

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| --- | --- | --- |
| Frequency Range | Use | Comments |
| <1 GHz | Net coverage, IoT | Already partly used for earlier MP generations, longer range coverage, less costly infrastructure |
| 1–6 GHz | Net coverage, IoT,capacity for data transfer | More spectrum available, shorter range and reduced performance compared to higher frequencies |
| >6 GHz | Capacity for very highdata transfer | Short range, allows high speed data transfer and short latency times |

From Simkó and Mattsson, (2019).

5G networks will include higher millimeter-wave frequencies that have not been used in the past for internet and communications technology (see Table 1). The 5G distribution is expected to add frequencies in the microwave spectrum in the low-(0.6 GHz – 3.7 GHz), mid- (3.7GHz – 24 GHz), and high-band frequencies (24 GHz and higher) for instantaneous communications (Verma, Tejaswini, & Pradhan, 2019). They continue that these higher frequencies travel short distances and are obstructed by buildings, thus, the system requires a dense network of static outdoor antennas every 300 meters as well as indoor systems. The problem here becomes the higher exposure to radiation, and like the 2G, 3G, 4G systems, the 5G has not had pre-market testing for long term health effects despite the fact that people will be exposed continuously to this microwave radiation. To pre-test will mean many years of delay before deployment, hence, the public becomes guinea pigs for the trial of its electromagnetic spectrum transmitted between the antennae or mast and a hand-held mobile device. This uncertainty is what gives rise to conspiracy theories, where at one end; the companies are accused of placing value on profit over the health of living organisms and the environment; while at the other end, the companies tout the supersonic availability of information on the network as an overriding factor over its marginal health concerns.

Reports have been published to allay public concerns over the impending rollout of 5G network services and its link to the novel COVID-19 virus that has impacted the globe leading to shut down of many countries and economies (Waterson & Hern, 2020; Broad, 2019; Finley, 2019). Waterson and Hern (2020) describe such claims as baseless and “dangerous nonsense.” They allude that part of the problem of challenging 5G conspiracy theories is a failure by network providers to promote scientific evidence about 5G, coupled with a terrified population looking to make sense of a chaotic world. The government and networks are struggling to convince the public, making them turn on telecoms engineers and arson attacks on masts expected to carry 5G facilities and infrastructure (Ogundipe, 2020). Some of these conspirators are said to organize in Whatsapp and Facebook groups where they share among themselves and their network, information that have no factual bases. The violence increased with the imposition of lockdowns due to the novel COVID-19 virus, spreading more fears as people do not know what to expect next while governments around the world struggle to grasp the magnitude of the impact of the novel virus.

The fact that Wuhan received 5G coverage in August 2019, almost 18 months after O2 launched its first London testbed for the technology on the Greenwich peninsula did not stop the rumor that Wuhan was the first city in the world to receive 5G network. Interestingly, Iran, one of the hardest hit nations by the novel coronavirus virus is yet to rollout any 5G coverage As social media interest in the topic grew, some unreliable media organizations have seen the controversy as an avenue to generate clickbaits. The Daily Star according to the press regulation campaign group Hacked Off published an article on 24 March – the day after the UK Prime Minister ordered lockdown in the UK – with the headline “Coronavirus: Fears 5G Wi-Fi networks could be acting as ‘accelerator’ for disease”. The report dubbed as an exclusive, was based entirely on quotes from non-scientists. The social media giant, Facebook also announced that it would start to actively remove fake claims that linked the corona virus to 5G and could lead to physical harm (Waterson & Hern, 2020).

**Health Concerns**

Health concerns over the short and long term effect of 5G to humans and the environment have been raised over time. In an appeal to the European Union, more than 180 doctors and scientists from 36 countries warned about the dangers of 5G rollout, which will lead to an increase in involuntary exposure to electromagnetic radiation (Hardell & Nyberg, 2020). Feldman et al. (2008; 2009) raised concerns over the ability of the human skin to act as antennas and therefore respond to millimeter waves, when they demonstrated that the sweat ducts in human skin are helically shaped tubes, overflowing with a conductive aqueous solution.

There are also concerns for effects of 5G applications on the eyes as it would receive some degree of radiation especially for near field exposures which could lead to cataract of the eye, one of the causes of blindness, with literature that have recognized the factors associated with its development to include; diabetes, smoking, age, and UVB exposure (Russell, 2018; Abraham, Condon & Gower, 2006; Ellwein & Urato, 2002; Ye et al., 2001). However, in a 2014 study, the World Health Organization (WHO) said that "no adverse health effects have been established as being caused by mobile phone use". However, the WHO together with the International Agency for Research on Cancer (IARC) has classified all radiofrequency radiation (of which mobile signals are a part) as "possibly carcinogenic," because there is no conclusive evidence that exposure may cause cancer in humans, also, eating pickled vegetables and using talcum powder are in this category. In addition, the radio waveband used for mobile phones is non-ionizing, meaning it lacks sufficient energy to affect DNA and cause cellular damage (Foster, 2019; Reality Check, 2019).

In a clinical trial of the effect of 5G on rats in 2018, a toxicology report released by the US Department of Health found that male rats exposed to high doses of radiofrequency radiation developed a type of cancerous tumor in the heart. In the research, rats' whole bodies were exposed to radiation from mobile phones starting from before they were born, for nine hours a day every day for two years. No direct cancer link was found for the female rats or the mice studied. It was also found that rats exposed to the radiation surprisingly lived longer than those in the control group (Reality Check, 2019). Similar findings were detailed in a study by Falcioni etal. (2018), released after those carried out by the US Department of Health, it corroborated the health risks associated with radio base station emissions. The research precisely, reports an increase in the incidence of brain and heart tumors in Sprague-Dawley rats exposed to EMF generated by a radio base station. It observed a statistically significant increase in the incidence of heart Schwannomas in treated male rats already at exposure levels much lower than those considered in the US study, consistent with those experienced by people on a daily basis (Chiaraviglio, Fiore & Rossi, 2019). Foster (2019) reported that 12% of respondents in in study in Europe were “endearingly concerned” about exposure to wireless base stations, broadcast facilities, and mobile phone and other new technologies

The clear observation in all the studies is the lack of conclusivity and definitiveness about the expected health impacts of 5G network. As is with most new technologies, there are always reservations about their impacts on one hand (Adelakun, 2020), and on the other hand, no country, especially the developed nations, want to be left behind in the tech war as there may be far-reaching consequences in military, health, and wellbeing, industrial applications, technology, banking, and financial services, urbanization and other facets of possible 5G application. The cost of being left behind is enormous and may mean depending on a competing nation for essential services. To a developing nation like Nigeria, this may not bear any significance as it is mainly a consumer nation depending mainly on imports even for a commodity like petrol motor spirit irrespective of the abundance of crude oil in the country, but for a nation like the USA, losing the 5G war to China or any other country would create an unfavorable balance of trade and loss of economic jobs.

**5G and religious controversy in Nigeria**

Religion is a highly sacred in Nigeria, the two most popular are Christianity and Islam. It is commonplace to see politicians in churches and mosques to receive the blessing and support of preachers especially during periods leading up to elections. Maybe it is because the politicians need God’s blessing in their aspiration or to show the religious electorate that they are traditional people and have reverence for God or Allah as the case may be. What is, however, undeniable is that the politicians need the votes of the religious community, which in turn depends on the leader of the congregation; An Imam if it is Islamic religion and a Priest/Bishop/Pastor if it is the Christian community. Towards any election, the congregation faithful waits on their spiritual leader for guidance, and they go out en masse to support such a candidate, and after the election, the winner reciprocates by visiting the religious organizations that supported their emergence (Ago, 2017; Akpos, 2015; ThisWeekng, 2018). Because the companies responsible for 5G technology are not politicians but business entities, the view of the religious was not considered until Pastor Chris Oyakhilome (also called Pastor Chris), founder and president of Believers LoveWorld Inc. popularly called Christ Embassy, based in Lagos, Nigeria, joined the 5G debate.

He boasts a worldwide membership of 13 million members (Haylon, 2018), with churches in 145 branches on five continents (*The Punch*, 2019). The church started with a prayer group led by Pastor [Chris](https://en.wikipedia.org/wiki/Chris_Oyakhilome), at [Ambrose Alli University](https://en.wikipedia.org/wiki/Ambrose_Alli_University), [Ekpoma](https://en.wikipedia.org/wiki/Ekpoma), Edo State, Nigeria, while he was studying architecture in 1987 and grew to its current height.  He also held the largest single-night event held in Nigeria in 2005 with 3.5 million people in attendance "Good Friday Miracle Night,” and over two million fans on Facebook. Pastor Chris is also the author of the daily devotional "[Rhapsody of Realities](https://en.wikipedia.org/wiki/Rhapsody_of_Realities)". The rhapsody of realities daily devotional can be downloaded in over 1000 languages and it is the most translated book in the world 2nd to the bible which in itself is "a book of books" (Falaye, 2015).

The pastor has been involved in quite a number of controversial statements and is not shy of sharing his views. He has been criticized by the Treatment Action Campaign for his support of faith healing as a supposed cure for HIV/AIDS and his devotional Rhapsody of Realities has claimed tumors will vanish if rebuked (*Mail & Guardian*, 2011). He claimed that the institution of marriage between a husband and a wife is akin to a master and a servant, where the wife exists to serve and please her husband (Byte, 2016). He has been accused of preaching prosperity gospel and using his followers for money, stating that those who donate to his ministry will be rewarded with wealth, health and good luck (Kuoppamäki, 2017). Breaking off from traditionally held conservative views in Nigeria, Pastor Chris made a statement in support of abortion especially in the case of rape, and he affirmed the woman should have the choice to terminate or keep the baby (Pulse, 2014). With the global lockdown in place to forestall the spread of the novel coronavirus, Pastor Chris added his voice to the 5G debate.

In a message that was broadcast on YouTube, Pastor Chris claimed that the lockdown of Lagos and Abuja was to enable the Federal Government to install 5G infrastructure. According to his assertion,

 “The federal government was pushed to lockdown Abuja and Lagos specifically. Why? Because of 5G in Abuja and Lagos. They already tested 5G in Abuja and they are engaging it already in Lagos. That’s the reason the federal government had to lockdown Abuja and Lagos. So the 5G could be installed. There are other cities planned for” (Augoye, 2020).

He continued that what killed people in Wuhan, China was not coronavirus, but 5G, and claimed that there is a global deception to deceive the global population to the true situation the world was dealing with. He adds that if the virus is claimed to be airborne, then isolation or staying at home cannot save anyone from the virus. He stated that the reason for the social distancing campaign was to make sure people could not gather to protest and or communicate with one another when the effects of 5G start manifesting, thus, the best way of striking fear into the population is to stoke the existence of a phantom and deadly virus. Categorically, he states that this should not be seen as a conspiracy theory but rather a proven reality, a fact, and an antichrist initiative. He also claims that the images being shared on the internet about the impact of the virus may be doctored images.

 “They carry photos from China, or from Italy, or Spain and show to the Americans, show to the British. You see things like “oh this is really happening,” but it’s not. They do not tell what’s killing the people. Two things are killing the people. The first one is where those 5G signals are being tested and have been turned on. A lot of people died. This is real. Number two, where are the people that normally got sick with the flu? Where are they? Nobody is talking about the flu right now” (Augoye, 2020).

Analyzing his statement objectively, it falls within the sphere of conspiracy theory not necessary because he is wrong, but because he fails to provide any empirical foundation to his claims. The scientists who have opposed the rollout of 5G technology have done so based on its health implications on human, not because of a new world order, about to take over governments in the world. This would be seen as one those moments the preacher would lend his voice to controversial statements in the society as he has done in the past. It was not surprising that after a few days, he released another statement that sort of backtracked on his earlier claims about 5G being the cause of the coronavirus. Pastor Chris stated that he was only opposed to 5G because of its perceived health risks and the seeming silence of authorized regulators to speak on its merits and demerits (Ojo, 2020). He seemed to now say that he was more concerned about the health implications of the technology and as a healing minister that cares and heals the sick, he would not like to see more people suffer. His initial statement was, however, followed by messages of support, criticism, and caution from different quarters.

**Reactions to the Controversy**

The statement from Pastor Chris led to a number of different reactions, from fellow preachers, politicians, media and the government of Nigeria. In his support Apostle Johnson Suleiman, President of Omega Fire Ministries Worldwide chided critics of Pastor Chris to avoid name calling and instead present their own alternative facts to the matter (Augoye, 2020), Pastor Adewale Giwa of Awaiting The Second Coming Of Jesus Christ Ministry, said those castigating Pastor Chris for his views are trying to inflame the emotions of the public to score points. He described them as “rabble-rousers.” He continued that evil people are using the 5G network to lay the foundation for the coming of the antichrist, continuing that Jesus Christ warned the people not to be alarmed when they start seeing the signs (Opejobi, 2020).

A former government minister and government critic Chief Femi Fani-Kayode also known for having controversial views on national issues issued a statement in support of Pastor Chris, praising his courage in speaking up against the forces of evil determined to introduce 5G that would lead to the coming of the antichrist (*Daily Post*, 2020).

“Say or think what you like about COVID-19, 5G, Bill Gates, Elon Musk, the Corona vaccine, the Illuminati, the New World Order, the Pope, the Deep State, Artificial Intelligence, the Bilderberg Group, the Bohemian Grove, the One World Religion or the One World Economy and believe whatever you will. It changes absolutely nothing and it cannot bury the truth or stop God’s counsel and plan from unfolding. Yet to be candid, what is inexplicable and utterly indefensible is for a “man of God” to dismiss the provisions and words of the Holy Bible in the Book of Daniel and the Book of Revelations as a mere “conspiracy theory”. You either believe the Word of God or you do not. Scripture cannot be broken and the end-time prophecies shall be fulfilled. COVID-19 will come and go and so will 5G and all sorts of other things that will be equally disturbing and shocking will come after them” (*Daily Post*, 2020).

A former Senator, Mr. Dino Melaye also supported the idea of 5G being bad for the society, he posted a video to YouTube and shared on his Twitter account where he described 5G as a killer and must be resisted by the public (Asadu, 2020).

 Figure 1: Senator Dino Melaye’s Twitter opinion on 5G

On the other end of the spectrum, there were others opposed to the postulations of Pastor Chris on 5G. Three prominent preachers condemned the views according to the report by Augoye (2020). The three clerics, Poju Oyemade, Sam Adeyemi and Matthew Ashimolowo, debunked Oyakhilome’s claims at separate fora. Ashimolowo, the senior pastor of Kingsway International Christian Centre in London, explained that there was no correlation between 5G and end-time signs and enjoined Christians not to promote conspiracy theories. Adeyemi, the senior pastor of the Daystar Christian Centre, said churches, mosques, schools, and markets were closed in Nigeria during the influenza pandemic which hit the world in 1918. He expressed this on an Instagram message he shared with Oyemade, the senior pastor of The Covenant Christian Center. He added that leaders should research issues before sharing with followers to avoid misleading them, he drew parallels with the current government reaction of shutting down the country to what happened in 1918, saying mosques, churches and schools were also shut down to limit the spread of the influenza epidemic in 1918. Responding, Mr. Adeyemi said there are opportunities in every crisis, and it is the leader’s duty to see the opportunities and not to project fear on his/her followers.

The government also responded to the suggestions about the dangers of 5G and its links to the noel coronavirus. The government clarified that there was no correlation between 5G technology and coronavirus. It also informed that there was no deployment of 5G in Nigeria at the moment, there was, however, a trial test in November 2019 for a period of three months, and that the trial had been concluded and the installation decommissioned. The trial was to study and observe any health or security issues that might be associated with the network. Government would continue to provide strong regulation of the nation’s telecommunication industry by ensuring compliance to standards put in place by Mobile Network Operators and other licenses in the industry to safeguard the heal and wellbeing of Nigerians (Osuagwu, 2020). The government’s statement, however, failed to address some issues it raised, first, which areas were 5G technology deployed? Secondly, was there a disclosure to the residents in those areas of the deployment of this technology and for the time period to enable them to make the decision of being exposed to radiation from 5G technology? These questions raise the need for transparency and accountability on the part of the government to build public trust in government statements.

Nigeria runs a very opaque government where secrecy is the order of the day. Akinrefon (2019) reported that the President, General Mohammadu Buhari in his campaign prior to the 2015 general elections promised to run an open government starting with a public declaration of his assets if he wins the presidential election. However, after his defeat of the incumbent, he backtracked on the public declaration of his assets and instead claimed that the assets needed to be verified by the concerned government agency before he can make them public. After much public pressure, his media adviser read out a list of assets purportedly belonging to the president, they never released the asset declaration form submitted to the Independent and Corrupt Practices Commission (ICPC).

The president also spent months in a UK hospital and failed to disclose to Nigerians the true nature of his ill-health (Adebayo & Busari, 2018), and with the outbreak of the novel coronavirus, the president and his chief of staff were rumored to have contracted the virus, again, after days of playing hide-and-seek, the president revealed that he tested negative while his chief of staff was positive (Ramalan, 2020), he has been receiving treatment in a private facility, away from the regulations and protocols put in place to check the spread of the virus (*Sahara Reporters*, 2020). So far, the president has addressed Nigerians twice in over 21 days since the declaration of lockdown due to COVID19 virus (*The Source*, 2020), this was after the usual hide-and-seek game associated with his government (Adebowale, 2020), both of the speeches look pre-recorded as no media organization was present to ask him questions to clarify the government’s approach unlike other world leaders who provide regular updates in front of the media and answer questions to calm public fears (Mayberry, Aziz & Allahoum, 2020; Smith, 2020).

Running an opaque government is what fuels conspiracy theories, and with a public where there is no trust between the government and the people, it becomes easy for anyone with a large following such as Pastor Chris to cause chaos by promoting scientifically unproven claims. It is left for the government to try and win back the confidence and trust of the people by being transparent about its activities and carrying the people along in all aspects of governance.

**Conclusion**

The key issues observed with 5G rollout is lack of synergy in communication between the network providers and government on one hand and the general public and stakeholders in the communication business. Megachurches in Nigeria have incorporated virtual media in their communication practices with their global audiences. I expect that they should be the ones more excited about the launching of 5G networks and it will create a better experience for the congregation in the church and those joining from different locations. It is thus expected that when launching new technology in Nigeria, the tech companies should endeavor to reach out to some of these mega-churches. The failure of networks to incorporate preachers in their 5G launch probably contributed to a great extent to the views of Pastor Chris and some of the others against the technology. It is most likely that Chris was influenced by conspiracy theories and protests in London against 5G technology, it is advised that all stakeholders be considered in future launch, and because of the influence such mega pastors have, it may not be out of place to organize an outreach privately for them to serve as a platform to avail them of the many advantages of 5G to their ministries and how they can use it to communicate effectively with their congregations.

Mega preachers are stakeholders in the 5G business because of the online ministries they run and the 5G will help them spread their preaching ministry with live online services especially in the age of coronavirus where social distancing and lockdown situation has required people to worship from home. The 5G technology would not have come at a better time. In fact, the variable that should be of concern to the government and network providers is the affordability of the services since people are already complaining of the cost of data services in Nigeria, and the tech companies complain of the huge cost of maintaining infrastructure in Nigeria especially with the poor power supply situation (Adepetun, 2020), the fulcrum of the 5G discussion in Nigeria may have been focused in the wrong direction, It is time to get back on the right track.

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