Dangers of Fifth-Generation Network (5G)

Shelleena Baxter

St. Petersburg College

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Cell phone technology has evolved over the years and customers are getting more excited as wireless carriers make every effort to provide them with the fastest internet speeds on their devices. Customers watched the network grow G by G from 1G (Edge), to 2G, then to 3G, then to 4G, and then to 4G LTE. The 4G LTE launch was amazing as customers were able to get to up 40 Mbps (La, 2014). When carriers promise fifth-generation network (5G), they promise data speeds up to 20 times faster than 4G LTE (up to 1 Gbps) but they do not promise high levels of Radio Frequency (RF) radiation. “The fifth-generation wireless standard (5G) is on everyone’s lips: enormous bandwidths, high-speed Internet access, the networking of tens of billions of devices worldwide – these are just a few of the buzzwords in the media. Yet there is no comment about the negative effects on humans and nature” ("5G," 2019). Therefore, as amazing as 5G sounds, it should be banned because of the dangers posed from high radiation and continuous exposure to radiation from mini-cell towers.

First, the 5G network poses a high health risk because of high RF frequency. The 5G network operates on a higher frequency than previous networks. Edge, 2G, 3G, 4G, and 4G LTE operate between 1 to 5 GHz while 5G operates between 24 to 90 GHz. Studies illustrate that exposure to high radiation can result in health risks such as cancer, DNA damage, and Sterility in men. Dr. Moskowitz says, “the lower frequency millimeter waves used in 5G could cause major skin, eye, and nervous system problems”. The RF associated with this network are lethal to our body, as it may alter the structure of our proteins in various organs like the skin, eye and others ("Why 5G Cell Towers Are More Dangerous," n.d.). Therefore, with the network operating on such a high frequency, the more dangerous it is to the living organism. High radiation frequency can result in changes within our body such as impact to our immune system which makes us susceptible to different diseases such as cancer. When the fetus is young, these RF frequencies can damage the DNA strands which can cause the baby to be deformed or even result in miscarriage. RF reaches the fetus through the mechanism that is used in x-rays and ultra-sound, they may pass through the skin of the mother. Nevertheless, the launch of this powerful network should be banned until the absorption of radio frequency can be controlled.

Secondly, humans face additional health risk from continuous exposure to radio frequency radiation from mini cell towers. The 5G network is ultra-high frequency and ultra-high intensity. In addition, the signal is not reliable because of the intensity of the frequency and the signal does not travel far. Because of this, wireless carriers will need a mini tower between every 2 to 8 houses which will increase the exposure to RF Radiation. The article "Why 5G cell towers are more dangerous” (n.d.) also mentioned that “a low powered exposure right next to someone, is more dangerous than a more powerful exposure a long way away." Also, the longer the exposure time is, the more dangerous it is. 5G network frequency is ultra-high intensity and cannot travel far and will need many mini-towers around our neighborhood. With the towers being so low a close to our bodies, we will be continuously exposed to RF radiation from the mini cell towers. Radiation is dangerous from a far distance and is even worst when it is closer and at such high frequency. Therefore, continuous exposure from cell towers means that it is more dangerous for our health.

Some people may be opposed to the decision on banning the use of the 5G network, this may raise a number of legal issues which may lead to judicial intervention. Nevertheless, there are those carriers who may not comply with the ban and go ahead to provide the service to the clients, therefore, some laws and policies should be established to deal with such cases. One of the measures that could be adopted to enforce such laws is the imposition of heavy fines on the non-compliance.

Finally, the 5G network brings great evolution to the wireless industry; however, it should not be rolled out because of deadly health risk from high frequency and the dangers of continuous exposure to RF radiation from mini-towers. Cell phone carriers aim to evolve and keep up with each other and promise customer the best possible experience with faster internet speeds but should never neglect the impact of the radiation that is being immitted from such technology. Cancer by itself is already a deadly disease and launching something that will increase the incidence of chronic disease is unthinkable. Faster downloads and upload do not equate to the increasing incidence of illnesses and diseases.

References

5G. (2019, February 24). Retrieved from https://www.naturalscience.org/topics/microwaves-mobile-communications/5g/

La, L. (2014, August 5). 4G LTE showdown: How fast is your carrier? Retrieved from https://www.cnet.com/news/4g-lte-showdown-how-fast-is-your-carrier/

Why 5G Cell Towers Are More Dangerous. (n.d.). Retrieved from https://www.radiationhealthrisks.com/5g-cell-towers-dangerous/