

## - Gadgets

# Cellphones and brain cancer, is there a link?

NewsDay (Zimbabwe) · 6 May 2022 · 11 · Michelle C Madzudzo

EACH month a certain cancer or cancers will be on awareness worldwide. But were you aware that the month of May is dedicated to raising awareness on various cancers and brain cancer is one of them? One of the big questions when it comes to brain cancer is, do cellphones cause brain cancer?



Cellphones have transformed the way we communicate, work and frankly live, but even though they have made so many things so much easier, they are not always worry free. The supposed health risk from mobile phones is the story that never dies. Cellphones have over the years been accused of everything from causing brain cancer to frying men's testicles.

What type of radiation do cellphones use?

Phones emit radiation to communicate with mobile phone masts and radiation has always had a bad reputation. Cancer mutations occur when ionising radiation such as Xrays and gamma rays are used, but cellphones emit a form of non-ionising radiation called radio frequency which does not have enough energy to break DNA and cause mutations which result in cancer. When using a cellphone tissues of the user will absorb a part of this radiation, ie the caller's hands, ears, scalp and brain, the closer the tissue is to the cellphone antenna, the more radiation absorbed, but this only results in tissue heating and the levels of energy given off by cellphone are much lower and are not enough to raise temperatures in the body.

What does research say?

Because cellphones are usually held near the head when being used, the main concern has been whether they might cause or contribute to tumors in this area including brain, head and neck and in some cases skin and testicular cancer. More importantly there has been no evidence that cancers associated with cellphones are on the increase, the rates have stayed pretty stable over the last decade, if cellphones really did cause tumors. You would expect to see a lot more cancers of these specific cases since mobile devices were invented.

In summary, most studies published so far have not found a link between cellphone use and the development of tumors. Several international agencies based on available evidence have evaluated the cancer-causing potential of cellphones and in general they agree that the evidence of a possible link is limited and more research is needed to look at possible long-term effects.

What can cellphone users do to reduce their exposure to radiofrequency energy?

However, research is still underway so in the meantime it is better to be safe than sorry, why risk good health by using our smartphones in not so smart ways.

Since most Zimbabweans have nomophobia (the fear of being without your phone) we need to adopt the following ways to reduce exposure to cellphone radiation:

- Text or use a bluetooth/ headset/speaker phone instead of calling
- Turn your phone off at night
- Never wear your phone in your pocket or bra
- Use a defender shieldcase to cover your phone
- Use your phone in conditions of optimum reception not in a confined space, for example elevator, basement, caravan, underground station
- Equip yourself with a mobile phone with the lowest (SAR) specific absorption rate, the upper limit of SAR allowed is 1,6 watts per kilogramme of body weight
- Use landlines to make phone calls
- Try to use your phone when you have the maximum number of bars indicating the best reception. When the signal is poor , your phone emits more radiation

Conclusion

Still the lack of increased rates of cancers that are at risk of cellphone radiation suggests that if phones have any effect on our risk of developing cancer, it seems to be minuscule compared to everyday risks we are happy to take. My personal advice is that while research is ongoing to determine whether cellphones really cause brain cancer or any other types of tumors or not, limiting alcohol, not smoking followed by maintaining a healthy diet and keeping active are the most effective ways to reduce cancer risk!