

SMARTPHONE – ALARMING ETIOLOGY OF BUCKET OF DISEASES IN FUTURE

Dharma Prasad Khanal, M Pharm, PhD¹

¹Department of Pharmacy, Manmohan Memorial Institute of Health Sciences, Soalteemode, Kathmandu, Nepal

https://doi.org/10.3126/jmmihs.v9i2.71772

Smartphones, also referred to as mobile or cell phones, have become an essential component of contemporary communication in the lives of individuals. The advancements in technology have significantly simplified our daily routines. Smartphones not only conserve our time and energy but also provide entertainment, information, and companionship. Currently, more than half of the global population utilizes smartphones, and the market continues to expand rapidly. These devices emit non-ionizing radiofrequency, which can be absorbed by tissues in proximity to the phone. The level of radiofrequency energy exposure for a smartphone user is influenced by various factors, including the technology of the device, the distance between the phone and the user, the nature and duration of smartphone usage, and the user's proximity to transmission towers. The International Agency for Research on Cancer (IARC) has classified smartphone use as possibly carcinogenic. Children may face a heightened risk compared to adults for developing brain cancer due to smartphone exposure, as their nervous systems are still maturing and are therefore more susceptible to potential carcinogenic influences. Additionally, the likelihood of traffic accidents increases by approximately three to four times when smartphones are used while driving, whether handheld or with a hands-free device, due to the distractions they create.

The blue light emitted from screens can penetrate deeply into the eye, potentially leading to retinal damage over time. Prolonged use of mobile phones may result in digital eye strain, commonly referred to as computer vision syndrome, which can contribute to myopia, evaporative dry eye, and general discomfort. Children, in particular, have become susceptible to the adverse effects of smartphones. If proactive measures are not taken soon, these devices could significantly impact their lives, with parents bearing the primary responsibility for this situation. As children engage with smartphones for activities such as listening to music, playing games, communicating with friends, and accessing social media, they are often exposed to content that is not suitable for their age. Moreover, not all parents supervise their children's smartphone usage, which can lead to detrimental habits that may adversely affect their lives. Young students are especially vulnerable to the negative consequences associated with smartphone use. The following are some of the harmful effects of smartphones: impaired vision, diminished concentration, increased anxiety, social isolation, poor academic performance, accidents, sleep deprivation, poor posture, engagement in immoral activities, and cyberbullying.

Smartphone addiction is increasingly recognized as a significant issue, potentially more harmful than substance addiction. Often referred to as "nomophobia," which describes the fear of being without a mobile device, this condition is becoming more prevalent. Individuals may exhibit compulsive behaviors such as frequently checking messages, social media, and various applications, resulting in excessive time spent on their devices. Common symptoms include feelings of anxiety when away from the phone, a decline in personal relationships, and reduced productivity. It is crucial to comprehend the psychological factors contributing to this dependency in order to effectively address it. Implementing cognitive-behavioral techniques and engaging in digital detoxes can help disrupt the cycle of addiction. Therefore, the responsible use of technology is vital; otherwise, it may pose a significant burden on public health in the future.

Further Reading

- Naeem Z. Health risks associated with mobile phones use. Int J Health Sci (Qassim). 2014 Oct;8(4):V-VI. PMID: 25780365; PMCID: PMC4350886.
- Frei P, Poulsen AH, Johansen C, et al. Use of mobile phones and risk of brain tumours: update of Danish cohort study. British Medical Journal. 2011;343:d6387. [PMC free article] [PubMed] [Google Scholar].
- RYAN GORMAN. [March 2014]. http://www.dailymail. co.uk/news/article-2591148/Retrive on 8th Oct 2024).
- Daniyal M, Javaid SF, Hassan A, Khan MAB. The Relationship between Cellphone Usage on the Physical and Mental Wellbeing of University Students: A Cross-Sectional Study. Int J Environ Res Public Health. 2022 Jul 30;19(15):9352. doi: 10.3390/ ijerph19159352. PMID: 35954709; PMCID: PMC9368281.
- Front. Hum. Neurosci., 28 April 2021, Sec. Cognitive Neuroscience, Volume 15 - 2021 | https://doi.org/10.3389/ fnhum.2021.636504
- Ochs, C., & Sauer, J. (2022). Disturbing aspects of smartphone usage: a qualitative analysis. Behaviour & Information Technology, 42(14), 2504–2519. https://doi.org/10.1080/014 4929X.2022.2129092.
- William T. Smale, Ryan Hutcheson, & Charles J. Russo Cell Phones, Student Rights, and School Safety: Finding the Right Balance. Canadian Journal of Educational Administration and Policy, 195, 49-64.
- Acharya, Jayanti ., Acharya, Indranil., Waghey, Divya. (2013). A study on some of the common health effects of cell-phones amongst college students, Community medicine & health education. 3, pp (1 4). Retrieved September 18, 2018, http:// omicsonline.org/a-study-on-some-of-the common-healtheffects-of-cell-phones amongst%20college-students-2161 0711.1000214.pdf.
- 9. Viola DM. Negative Health Review of Cell Phones and Social Media. J Ment Health Clin Psychol (2021) 5(1): 7-18.

How to Cite

Khanal, D. P. Smartphone – Alarming Etiology of Bucket of Diseases in Future. Journal of Manmohan Memorial Institute of Health Sciences, 9(2), 1. https://doi. org/10.3126/jmmihs.v9i2.71772

