

‘Better Half’ Of Today’s Era- Mobile Phones**Dr. Ashutosh Kumar¹**2nd year P.G. scholar, Dept. of Rachana Sharir,
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Parul Institute of Ayurveda limda, Vadodara.**Abstract –**

Mobile phone has become important part of our lives. One cannot imagine the life without it. According to new data released by analytics firm Flurry, a normal uses of phone is up to 5 hours per day. Just like everything mobile phones have both positive and negative effects. Mobiles phones are the best at communication convenience. As their small size light weight, that makes them portable. It is the best source of entertainment. Very useful in studies and business - in both fields the mobile phone has become like compulsory gadget. While there are many negative effects such as bad impact on studies as mobile phone uses are addictive consumes most of our time which reduces productivity. Accidents distraction because of mobile phones while driving is very common and health issues like sleep disorders, hearing impairment, eye problems, skin allergies cancer, stress.¹

Keywords – Mobile, Communication, Disorders, stress

Introduction

The wireless technology was invented in the year 1880 by Alexander Graham Bell and Summer Tainted when first time the photo phone was invented. In the recent era, there are dissimilar types of mobile phone devices which are utilized for communicating with each other. The mobile telephone sets are also a part and parcel of everyday life all over the globe. The Wi-Fi devices are connected to the exchange of information and data by using the mobile telephones. The Wi-Fi devices also emit the radio waves. There are so many wireless devices like cell phones, tablet PCs, audio players, digital cameras and the PC, all devices being used Wi-Fi.

The mobile radiations utilize the frequency range from 3 kHz to 300 GHz, which consists of different wireless devices. For instance, a laptop is connected to the Wi-Fi and it is placed on laps in the distance of 60 cm, it is very harmful. With the rapid growth of mobile phone device, the technology developed an alarming situation for the normal functioning of the biological systems of the human body and lead to serious ailments such as diseases of brain like cancer, brain tumor, Alzheimer’s disease, Parkinson’s disease and so on. Also the short term effects (hormone disruption, sleep disruption, on cent ration, impairment of cognitive function, behavior, and attention) and long term effects (DNA damage, Male infertility). For children, the wireless devices

are more serious because they have thinner bony skulls and their neural systems are thin. The network developed during the installation of WLAN by using the router, transmitter, receiver and the admission levels are solid and all the devices communicate with each other through it. The mobile phone devices also communicate by utilizing the electronic radiations which are more hazardous and cannot protect the human physical structure.

Impact of mobile phone on human health Presently, mobile phones are being used everywhere because these devices do not use the physical cable/wire that is demanded for the communications purposes. Their demand for the electromagnetic radiation for receiving and transferring the data in the air; either it is a network or a sound data. These mobile phone devices give off harmful radiations which effects to the human health because such type of radiations are available everywhere and their existence cannot be felt.

These radiations also penetrate in the body and they affect the cell structure and the DNA. The different types of radiations are being used for connecting the mobile phone devices with each other and each type of radiation having own frequency and wavelength, the frequency mostly ranges from 3 kHz to 300 GHz. There are several cases of mobile phone devices such as cell phones, wireless router, tablet PC, cell telephone tower, wireless hand free, Bluetooth device, audio player, laptop connected to

the wireless router (Wi-Fi). These devices give off harmful radiations which can contribute too many harmful diseases such as Brain Tumor, Male Infertility, and Ear Hearing Impairment, effect on the foetus, Alzheimer's disease, Parkinson's disease, asthma, Heart trouble, insomnia, high blood pressure, leukaemia, birth defects, Immune system, and rheumatoid arthritis. Radiations are also causes of some symptoms which are headache, sleep disruption, tiredness, and so on DNA damage can also happen because the wireless radiation which given off by the mobile phone devices during the sending and receiving process of the data which is broken down by this survey based research. The study is directed with the assistance of doctors with the help of survey questionnaire; this survey contains some of the diseases which are induced by these radiations like male infertility, brain tumor and the ear hearing impairment.

Disease introduction

Male infertility: The reproduction is a lifelike experience for couples. Nevertheless, it is very hard to contrive for the child. Basically the infertility is a wider problem in the universe due to different causes. The male infertility problem creates the sperm production (sperm production in low number) or the transfer process of sperm. The infertility problems are sperm motility, sperm count, sperm morphology, functions of sperm, impaired Leydig cell, Sertoli cell, abnormality of sperms, to stop delivery of sperm, a chronic health problem. The causal agent of male infertility is because of testicular impairment resulting in the testicles not producing the sperm cells, the infertility of man includes the imbalance of hormone, behavioural problem and psychological troubles. The negative impacts on male fertility are smoking, use of drugs, alcohol abuse, tight underwear, radiation exposure, pesticides, paint, lead, and radioactive.

Brain tumor: It is a mass of tissue which is abnormal and in this condition the body cells die and replaced by the cells and other tumors. The abnormal cells grow and they produce a flock which is named as the main neoplasm. These come out of the several cells, which constitute the brain, CNS (Central Nervous System). There are several cases of brain tumors such as astrocytic and the gliomas tumors. There are two types of Brain Tumor Malignant

Tumor (Cancerous Tumor): The malignant tumor is a cancerous tumor that is either primary or secondary. The malignant tumor can be elementary or secondary brain tumors. It starts in the mind. The primary malignant brain tumor is fast growing tumor than the secondary malignant brain tumor where immediate treatment is important for primary malignant tumors because it can open rapidly and damages the spinal cord and other regions of the head.

Benign tumor (Non-cancerous tumor): The Benign tumor is noncancerous tumor means that stay in one spot and do not attack the other region of the head or body. It is a very slow growing brain tumor. It can be removed by the treatment and not come back. The brain tumor can occur at any age and the cause of brain tumors has been still not solved. In that respect are various symptoms of brain neoplasms that are: numbered, headache, seizures, mood changes, memory trouble, trouble walking, hearing, visual sensation, vomiting and nausea. The brain tumor is divided into two grading which are:

- **Low grade tumors:** The low grade brain tumor's grade 1 or 2 which are slow in growing and facing pages. These contain freely malignant cells, that means to detain in the one place and do not engage the other body sections and regions of the head. The level 2 is glamorous that will arise after the discussion.
- **High grade tumors:** The high grade brain tumor's grade 3 or 4 that is either primary tumors or secondary tumors. There are several cases of primary high grade tumor, according to the case of the brain cells. The Glioma is also the case of primary high grade brain tumor that can be either grade 3 or tier 4. The more immediate treatment for the high grade brain tumors is important, it can propagate rapidly and damages the spinal cord and other regions of the head. The discussion of secondary brain tumors will vary according to the type of tumor like (breast, lung, etc.)

Ear hearing function: Hearing problem usually develops according to the age and it can occur due to the loud disturbance. In that respect are different cases of hearing problems which creates trouble in hearing means the people cannot listen clearly and they continue on asking people again and again. One of the

cause of hearing loss is listening to the music with high bulk. The classification of hearing loss can be sensory, conductive, neural, mixed hearing loss. The hearing loss may be one-sided (single spike) or may be bilateral (both ears). That point having some degree losses that are (Deaf/Deafness, Hard of hearing, Hearing Impaired, Residual hearing).

- Sensory: This is the type of loss range from minor to deep, that affects the frequencies than others.
- Conduct: Conductive loss of hearing is caused by disease or barrier in the center or outer ear that often disturb all the hearing frequencies.
- Neural: This type of hearing loss is caused due to the damage of central nervous system (CNS).
- Mixed: This hearing loss occurs in both ears outer/middle and inside of the auricle.
- The grounds of hearing loss can take place of hereditary factor, if he or she or you can say your spouse delivers a family problem of listening loss, thus it is important to look up with the genetic counselor before becoming pregnant. The genetic counsellor will tell you more or less all the birth defects and treatment. The hearing loss due to the genetic has two forms:
- Syndrome: The Hearing loss defects took place with the other birth, such as Pendred syndrome can have effect on hearing function, balancing in hearing sense. Ring loss that occurs when a child had a bun in the oven .1

Precautions to reduce mobile phone radiation exposure

Evidence so far suggests that mobile phones aren't harmful, but long-term risks and consequences are yet to be clarified.

If you are concerned, you can reduce your exposure to RF radiation by:

- choosing a mobile phone model that has a low specific absorption rate (SAR), which refers to the amount of RF radiation absorbed by body tissues
- using a landline phone if one is available
- keeping your mobile phone calls short
- using a hands-free kit

- not carrying your mobile phone close to your body when it is switched on
- being wary of claims that protective devices or 'shields' can reduce your exposure to RF radiation – there is no evidence to suggest these devices work. In fact, they can increase RF radiation, because the phone will automatically increase its RF output to combat the effects of the shield to get the best level of communication.2

Conclusion

It is concluded that by usage of the mobile phones three diseases such as the brain tumor, male infertility and ear hearing function can be affected on human health. The cell phone use is more dangerous on human health, as doctors believed that all wireless devices like cellular phones, laptop, wireless router, wireless earphone, cell telephone tower, Bluetooth devices and tablet PC are accountable for the development of diseases of brain tumor, male infertility, hearing function. It is advised that one should keep away from the use of Mobile phone or decrease its usage as low as possible because it may affect the human.1

Recommendations

- Do not keep the cell phone in a trouser pocket.
- Do not utilize the cell phone for long time chat use the headphones for extended calls.
- Do not put the mobile phone on women's stomach during pregnancy.
- In schools and colleges do not use mobile phone devices for the intellect that it is dangerous for the youngsters and it is recommended to utilize the land line telephone.
- Create awareness among the public about the harmful effects of mobile phone rays on the human Health. Such workshops be established as soon as possible.
- The scheme of placing the mobile phone towers in the area should be ostracized. If they are already existing, they should be shifted without any delay to preserve up the masses from their hazardous effects.

Things to remember

- The current international consensus is that mobile phones don't cause cancer or promote the accelerated growth of existing tumours.

- Cancer can take many years, even decades, to develop. Population studies so far have only monitored the health effects following a few years of mobile phone use. Using a mobile phone while driving significantly increases the risk of traffic accidents.²

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