

CardioNation: Rhythming a Shirt Right !!!

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Abstract

The world population is currently estimated to be around 6.92 billion, and with the technology advancement, we humans have started using mobile phones, ipods and other electronic gadgets. A report in the PC World states that cell phone subscriptions have reached 3.3 billion, which is half of the world's population. We tend to keep these dearer objects of desire mostly in our shirt pockets. The basic fact about cell phones is that they emit microwave radiations apart from radioactive radiations. And studies have revealed that cell phones kept closer to heart is one of the reason for heart attacks and strokes in young people. Young people form a major share of cell phones and ipod users and in turn they are the major share of people who are fashion victims. This paper is an attempt to argue the need of design intervention in clothing, Shirts in particular. This paper also focuses on the need to shift shirt pocket from left side to right side. And to remind that Fashion designers are the real masters that embellish the beauty of women and smartness of men. Designers shape up bodies in the most modest manner and make anyone look stunning and sensuous. Now it's time for us to shape up their healths too.

Introduction

This twenty first century is facing many a challenges such as environmental, socio economical and health related issues to name a few. Cell phones or mobile phones were launched only in early nineties. But it has already revolutionized communication. It is a low cost utility item which has come in to the custody of the common man. It is estimated that 3 billion people are using mobile phones worldwide. In other words 300 crores of people are using it every day. The ill effects on human health by using mobile phones and other devices emitting radiation is definitely a subject of interest and requires a thorough study as there is an enormous usage of mobile phones throughout the world from the rich to the poor alike. The percentage of population using mobile phone in the world is different from country to country. It is as high as 100% in Australia, 60-70% in USA and 10-15% in countries like India. Almost everyone uses cell phones. All over the world, tens of millions of people are

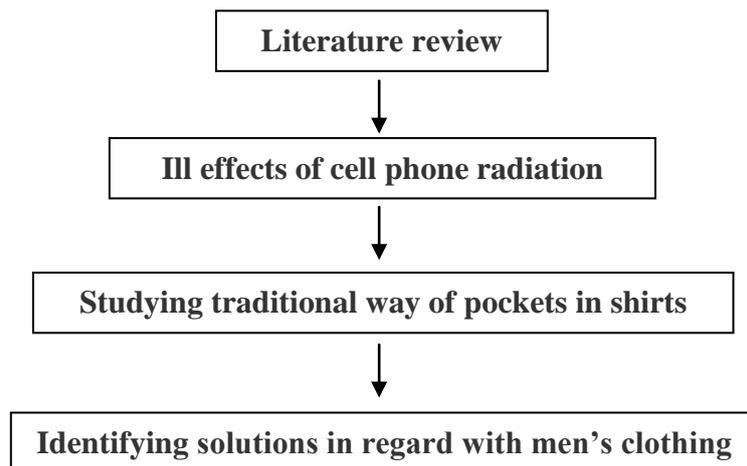
pressing them against their hearts for hours every day. The important question is whether it is really dangerous?

Mobile phones are equated to microwave ovens with regards to the radiation power; which is in the frequency ranges of 900 MHz to 1.8 GHz for the mobile phones, where as it is 2.5 GHz for the micro wave ovens. The power output ranges from 0.6 to 3.0 watts in case of mobiles and 500 to 1.1 k Watts n case of Microwave ovens.

The basic fact about cell phones is that they emit microwave radiation. If any electronic or a communication device which is not attached by a wire, then it is definitely emitting radiation. A cell phone that is switched ON but not in use is also emitting radiation. (1)

Organs that are susceptible to radio waves include heart, lungs, eyes, nervous system, thyroid gland and testes. Today, with the wide use of cell phones, the effects on the heart especially apart from lungs, eyes, nervous system, thyroid gland and testes would spread like a plague in the human society but would barely come in to observation until it disables a person totally with side effects like heart arrhythmias, blood pressure fluctuations, chest pains, headaches, memory loss, dizziness, fatigue etc. But as we all know cell phones are now an *essential evil* but we should also now know how to control and reduce the side effects caused by the radiations emitted by these cell phones and other gadgets we always carry with us. Through this paper I would want to address the design fraternity, design houses and the glorified tailors on how we can change the future shape of the world we live in by a very simple thought.

Figure 1: Frame work of research



Why do shirts have left pockets?

1. Because most people are right-handed, and it would be easier to take out things kept in the left pockets. But all these ages' if left-handers could easily use a left pocket, so right-handers can also pretty well use a right pocket. Why not make the left-handers feel good, for a change?
2. In mankind's thinking the heart is towards left but anatomically the heart almost is centred, but a little towards left side. Traditionally the pocket is where a loving man's heart is and is carrying his pocket money with him most of the time.

A call for action

There was a large amount of agreement on the areas of research that is most needed now. They include diagnostics, drugs, vaccines for the priority diseases, of course. But equally important if not more so now, they include the social and environmental requirements for a good health. Most importantly of all, these factors need to be understood as part of a coherent system and set of approaches. (2)

The first ever study in the cell phone industry was made by Dr. George Carlo and his team which proved the health hazards including heart problems of cell phone radiations without doubt. Dr. Carlo's findings have been proven correct by many separate researchers around the world and the cell phone manufacturers have worked hard to see that many of these studies and reports did not reach the public in general but reports began to leak that use of cell phones affects your heart. (3)

Braune et al. [5] have reported acute effects on blood pressure in human volunteers exposed to a conventional GSM digital mobile phone positioned close to the right side of the head. After 35 minutes of exposure, heart rate, blood pressure and capillary perfusion were measured with the subject either supine or standing for 60 seconds. They found that the heart rate during these tests was slightly lower after exposure to RF radiation than following nonexposed control sessions, and both systolic and diastolic blood pressure were elevated by 5–10 mm of mercury. (4)

Some people who are electrically sensitive and complain that they have a rapid or irregular heart beat and feel chest pressure or pain. (5)

It was found that some individuals developed a rapid or an irregular heart beat when exposed to pulsed microwaves (from a cordless phone base station) at levels considered safe by the WHO, FCC, and Health Canada.

Pacemakers are used to regularize or correct any abnormality of the heart's rhythm. Cell phones may interfere with pacemakers putting the life of the heart patient under threat. We know that pace makers can malfunction if they are exposed to interfering microwave frequencies and people with pace makers are told to stay away from microwave ovens and other microwave emitting devices. The newer pace makers have shielding to prevent interference. But the human heart comes without a shield. So it is not only the child or adult

with a pace maker that needs to be careful about their exposure to microwaves, all of us need to be aware that this radiation may affect the heart. (6)

As you know that the human body is an electrically operated machine. Your brain, nerves, and your heart have their own electrical systems to maintain normal health. Radiation health effects upset these systems. When these electrical systems in your heart fail, your heart misbehaves. It loses the rhythm which keeps you alive by regular pumping of your blood to your entire body. Your pace maker should correct this defect. Your heart's electrical system regulates your heart beats. One of the major radiation health effects from cell phone radiation is that your cell phone prevents rhythmic contraction of your heart muscles. (7)

The health effects of radiation are not very immediate as it is likewise in smoking. The effects would be able to be realized only after a long duration, maybe 2 to 3 years later and in the long run.

Figure 2: Left Pockets



Why shirts should have a right pocket?

As the advancement of technology took over, since 1970's we started using mobile phones, i-pods etc. The basic fact about cell phones is that they emit microwave radiation and studies reveal that cell phone kept close to heart is one of the reasons for heart attacks and strokes in young people. And no more is a man carrying his pocket money as the plastic cards have already taken replaced the paper currency notes. So shifting the pocket from left to right in shirts could lead in controlling the radiation emitted by cell phones to contact the heart directly. Don't you think is it not our responsibility as designers to get change in the way we shape the future generations and lessen the burden on the heart?

Figure 3: Right Pockets



Conclusion

We are constantly susceptible to microwave radiations by exposure to cell phones and other gadgets, and so by shifting the pocket to right will protect our self from heart strokes, chest pains and other side effects of carrying the cell phone in our left pocket. The goal of this paper is to communicate an argument that gives an opportunity in the current day context and to make many a people who unknowingly use pockets on the left side of their shirts. Let's make the world we live in a better place at least for the coming generations in our own small way of contributing for shifting the pocket to the right. Therefore I plead all the design fraternity, design houses and glorified tailors to stitch the pocket towards right. And also I request the textile scientists to think over a variety of possible materials which can prevent cell phone radiation from reaching the heart. Prevention is better than cure. As the coming generations need a better future, let's be a part of the prevention. Lets heal the world and let's make a change today onwards. I guess all the design community would be greatly acknowledged for our shift of the pocket. Let our motto be: **RIGHT is RIGHT !!!**

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Key words

Right Pocket, Left Pocket, Shirts, Mobile Phones, Cell Phone Radiation, Heart, Heart Arrhythmias.

About the author

Avinash Raipally is a Designer, Entrepreneur and an Academician. Previously the author has earned a masters degree in design from Domus Academy in Milan, Italy.

He held posts in the capacity as a Designer and Design Director in various places like Studio Shout, Inter prêt-a-mature and reDsin, etc. He has to his credit various projects under the names like – Gucci, Christian Dior, Frankie Morello, Swarovski and Future concept lab, etc.

His interests lie in product design, graphic design and with similar research interests.

At present he is holding a post as an Asst. Professor and Centre Coordinator (Head of the Department) for Fashion & Lifestyle Accessories Department at NIFT - Hyderabad.

He travels extensively in India & Abroad alike. He is all set to take Indian design to the next level, so he has now chosen to DESIGN DESIGNERS.