

Effect of usage of mobile phone in trouser pocket on quality of semen parameters

D.A.L.Munasinghe¹, M.K.B.Weerasooriya², J. A. Liyanage², H. P. Wakkumbura¹

A cross sectional study was carried out in the fertility clinic of Gampaha Wickramarachchi Ayurveda hospital during the period of August 2014 to August 2015 to find out the effect of carrying mobile phone in trouser pocket on the quality of semen parameters. Mobile phone has become an essential instrument among the lives of modern society. It assists to globalize the world. The disadvantage is the emitting of harmful rays when it's in use or switch on mode. However this bad effect basically depends on the way of handling the item. In vitro studies in foreign countries have shown that mobile rays have a negative effect on sperm motility. However, local studies on subject are handful in amount. Thus the current study was set up to trace the effect of switch on mobile phones kept in trousers on semen parameters. Every male who visited the clinic for fertility issue was personally evaluated on consent to gather the behavioral data. The semen of each was also collected (after 3 days absent from ejaculation) and analyzed separately. Out of 81 subjects 51 were used to carry the phone in trouser pocket as a custody. However when comparing the average semen parameters of them such as volume, sperm count, sperm motility and morphology with the same of non-users, it was clear that though there was a slight reduction of mentioned parameters in the test group it was statically not significant ($P>0.05$). Thus according to the final result the usage of mobile phone in trouser has a less effect on the quality of semen parameters. However this could be due to non-continuous usage of switch on mobile phone in the particular site. More over its better to keep the phone out of the site of testis when concerning male fertility.

Key words: Mobile phone, Trouser pocket, Semen parameters, Male fertility

1 Department of Botany, University of Peradeniya, Peradeniya, Sri Lanka

2 Department of Chemistry, University of Kelaniya