Examining the impact of using cell phones on male infertility

Parisa Gharibi, MD student, Bushehr University of Medical Sciences, Member of Student Research Committee

+989171759970, Parisa_gh_91@yahoo.com

Behnoosh Jalili, Midwifery student, Bushehr University of Medical Sciences, Member of Student Research Committee

Introduction: Nowadays reproductive health is at risk due to exposure to different environmental factors. As a highly used device, cell phones impact different aspects of life and health. This paper aims to investigate how cell phones affect male reproductive system and to find ways to minimize negative effects. This research is a literature review of newest articles dealing with this issue.

Results: Male infertility accounts for about half of infertility rate. Semen analyses reveal the changes in sperm parameters. People who do not use cell phones, have sperm count of $85.89\pm35.56\times10^6$/mL, motility of 67.80±6.16%, viability of 71.77±6.75%, and morphology to compared to normal of 40.32±13.06%. In comparison, the analyses for people who use cell phones for more than 4 hours a day show $50.30\pm41.92\times10^6$/mL of sperm count, 44.81±16.30% of motility, 47.61±16.67% of viability, and 18.40±10.38% of morphology. Some articles investigate impact of cell phone radiation on testes temperature and disruption of Spermatogenesis. In normal conditions testes temperature is 2 degrees lower than the temperature of other parts of body. Affected by cell phone radiation, this temperature goes up.

Discussion and Conclusion: The studies suggest negative impacts of cell phones by showing decreases in some parameters of semen. However, more comprehensive studies are needed to provide more detailed understanding of different aspects of potential impacts of cell phones on reproductive health. Considering the negative results, further efforts such as designing new devices is required to minimize negative impact of cell phones radiation.

Keywords: male, cell phone, infertility, sperm, radiation