

THE IMPACT OF PHYSICAL, LIFESTYLE AND OCCUPATIONAL FACTORS FOR THE GENERATION OF POOR SEMEN PARAMETERS OF MALES ATTENDING INFERTILITY CLINIC, CASTLE STREET HOSPITAL, COLOMBO

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Infertility is a major health problem around the world. Male infertility contributes generally 50% to this matter and it is also a major reproductive health related issue related to the Sri Lankan population as well. Lifestyle habits, environmental and occupational hazards, physical status of individuals can be recognized as major risk factors which may affect male infertility. A cross sectional study was conducted on 299 individuals at Castle Street Hospital infertility clinic from 13th July 2017 to 30th September 2017. Socio-demographic, lifestyle and occupational risk factors of each individual were collected using interviewer administered questionnaire and BMI (Body Mass Index) was measured as a physical parameter. After 2-5 days of abstinence, samples were collected for laboratory investigations. Sperm concentration, motility, morphology and semen volume were measured. Data analysis was performed by using SPSS and SAS. Significant associations were found for abnormal sperm concentration ($\leq 15 \times 10^6$) with smokers and tight

underwear users ($p < 0.05$) and abnormal sperm motility ($\leq 32\%$) with tight underwear users ($p < 0.05$). Tight underwear users and smokers have shown significant relationships with semen parameters whilst age, a socio-demographic factor also has shown a significant relationship with few of the semen parameters. Age, smoking and wearing tight underwear has shown a great risk for the generation of poor semen parameters, which can lead to male infertility. However, BMI did not express a significant relationship with any of the semen parameters ($p > 0.05$). Furthermore, it is very important to carry out large scale studies regarding this problem to establish the effect of above mentioned factors.

Keywords : Male Infertility, Semen Parameters, Risk Factors