# Research and Reviews: Journal of Medical and Health Sciences

Smoking and its Effects on Men's Sexual Health

Sravani Dadi1\*

Department of Pharmacy, Andhra University, Andhra Pradesh, India

# **Short Commentary Article**

Received: 05/05/2015 Revised: 25/05/2015 Accepted: 01/06/2015

# \*For Correspondence

Department of Pharmacy, Andhra University, Andhra Pradesh, India, Tel: 8125735069, E-mail: <u>sravs.sweety5@gmail.com</u>

Keywords: Smoking, infertility, fertility, Sperm Count

# Smoking and its Effects on Men's Sexual Health

#### Why do men usually smoke??

Most men start smoking in their teens and even get addicted by the time they reach adulthood. Many of them have tried to quit but failed to do it because smoking is such an addiction. There are several reasons why they smoke [1-3]. Some of the most common reasons are Peer Pressure (if one among the groups is likely to begin smoking; the young teenagers easily get influenced.), Risk taking Behaviour (Few countries have designated smoking areas, and restrictions about when & where to smoke often tempts people to break the rules), Parental Influence (A recent study concluded that children of smokers are more likely get start smoking than children of non-smokers), Self-medication (Men who are addicted to smoking report a series of positive happenings in their lives after they started smoking . Some of them are reduced tension, good sense of well-being, cure for mental illness etc.), the most common and the best reason that men always tell is stress relief [4-8].

For men who aren't experiencing extreme emotional instability, cigarettes may even now turn into a self-medication toward oneself. Example: Since a long time, soldiers have taken up smoking on the war zone to manage wartime stress. Numerous individuals encountering much lower levels of anxiety - in a high-stress work, may begin to smoke as an approach to deal with the pressure and nerves connected with the circumstance. Men are more obsessed to smoke cigarettes to control their feelings than ladies, as indicated by a study [9-13]. Many explorations discovered that men were more probable than ladies to snatch a cigarette in the event that they felt irate, on edge or miserable. They found smoking reduces anger and depression in men.

# How do smoking effect health??

Reports from a diverse study have recognized that the body systems affected by the harmful effects of smoking are mainly the respiratory, cardiovascular and when it comes to men; the reproductive system also get badly affected. A recent study about smoking and infertility concluded that men with smoking as a habit had more infertility problems like reduction in semen quality and quantity, varicocele, erectile dysfunction, etc. There were also significant variations in sperm concentration, motility, levels of serum in between smokers and non-smokers [8-12]. So, due to an attribute that cigarette contains harmful substances, there has been a worry that smoking could have adverse effects on male reproductive system.

The most common adverse effect caused because of smoking is erectile dysfunction and varicocele. The combination of smoking and varicocele has a strong evidence for the cause of oligozoospermia. So, the male smokers with varicocele are 10 times more probable to be effected with oligozoospermia than the non-smokers with varicocele and five times greater than men who smoke but free from varicocele. This is because of cigarette smoking increases the secretion of catecholamines from adrenal medulla which reaches the testis and flow down the spermatic vein.

# Effect on Seminal Parameters

The prostatic secretion has a thin fluid containing proteolytic enzymes, citric acid, phosphatases and lipids; out which ascorbic acid is the most vital anti-oxidant in semen. Healthy seminal plasma contains  $\sim$ 10 mg/dl ascorbic acid where there is 20%-40% decrease in serum ascorbic acid in heavy smoking men which apparently decreases the sperm quality [14].

The main reason for the alteration in the sperm quality is the active exchange of cigarette components between blood, testis and testis sacs. This increases the possibility of inducing oxidative stress which leads to sperm DNA damage. A comparative co relation of seminal ascorbic acid was made between smokers and non-smokers and observed that there is a significant difference in sperm count (quality & quantity), sperm motility and sperm normal forms percentage [15]. According to British Medical Association (BMA) up to 120,000 UK men in their 30s and 40s are impotent as a direct consequence of smoking.

Smoking leads to the development of atherosclerosis (condition where there is narrowing and clogging of arteries followed by decrease in blood supply thereby causing reduction in the blood flow to the penis)[16-19]. The nicotine in the cigarette smoke results in the temporary constriction of the penile arteries which effects blood flow to the penis there by increasing the chances of erectile dysfunction. **Conclusion:** 

Taking all the above into consideration, people should quit smoking as a deep sense of responsibility for their future generation as it is harmful and contains numerous carcinogenic substances.

# REFERENCES

- 1. Matt Cunningham. 10 Reasons People start smoking. (2015)
- 2. http://www.sciencedirect.com/science/article/pii/S2090123210000585
- 3. <u>Vijay P, Sai KA, Shipra C. Sperm Immobilizing Bacteria and their Role in Infertility: An In Vivo</u> <u>Study. Androl Gynecol: Curr Res (2014);2:4.</u>
- 4. Jequier AM, Philips N, Yovich JL. The Diagnostic Value of a Routine Genito-Urinary Ultrasound Examination for Men Attending an Infertility Clinic. Androl Gynecol: Curr Res (2014); 2:4.
- 5. <u>Should Men Take Prenatal Vitamins?</u>
- 6. <u>Chung E. Varicocele and Male Infertility: Evidence in the Era of Assisted Reproductive Technology.</u> <u>Reprod Syst Sex Disord (2014); 3:e114.</u>
- Lampiao F, Mahala M, Zumazuma A. Erectile Dysfunction as an Early Marker of Elevated Blood Glucose Levels and Blood Pressure in Malawian Men in a Rural Setting. Reprod Sys Sexual Disorders (2013); 2:124.
- 8. <u>Wei S, Shi Z. Resolutions for Infertility-Far from Being Resolved. Reprod Sys Sexual Disorders</u> (2012); 1:e104.
- 9. <u>Amesse LS. The Fascinating World of Androgen Insensitivity Syndromes. J Genit Syst Disor</u> (2013); S1.
- 10. <u>Walker LM, Robinson JW. Back to the Basics: Origins of Sex Therapy, Sexual Disorder and</u> Therapeutic Techniques. Reprod Sys Sexual Disorders (2012); 1:109.
- 11. <u>López-Úbeda R, Matás C. An Approach to the Factors Related to Sperm Capacitation Process.</u> <u>Andrology (2015); 4: 128.</u>
- 12. <u>Wang QL, Tang LX, Deng SM, Tang YG, Zheng LX. Increased Oxidative DNA Damage in Seminal</u> <u>Plasma of Infertile Men with Varicocele. Andrology (2014); 3:119.</u>
- 13. <u>Millet C, Wen LM, Rissel C,Smith A, Richters J, Grulich A, de Visser R. Smoking and erectile</u> <u>dysfunction: findings from a representative sample of Australian men. Tob Control 2006;15:136-</u> <u>139.</u>

- 14. <u>Tengs, T and Osgood, N. The link between smoking and impotence: Two decades of evidence Preventive Medicine 2001;32(6):447-452.</u>
- 15. <u>Peletiri IC, Ale ST, Peletiri DC. Upgrading the Diagnostic Value of Seminal Analysis Using Sperm</u> <u>Quality Analyzer Visual (SQA-V) Protocol for Clients Associated with Infertility; the Federal Capital</u> <u>Territory, Nigeria Experience. Andrology (2014) 3:120.</u>
- 16. Taitson PF, Mourthe EY. Seminal Parameters: Current Status. Andrology (2013); 2:e111.
- 17. <u>Omran HM, Bakhiet M, Dashti MG. Evaluation of Age Effects on Semen Parameters of Infertile</u> <u>Males. Andrology (2013); 2:106</u>
- 18. <u>Sukprasert M, Wongkularb A, Rattanasiri S, Choktanasiri W, Satirapod C. The Effects of Short</u> <u>Abstinence Time on Sperm Motility, Morphology and DNA Damage. Andrology (2013); 2:107.</u>
- 19. Mostafa T. Smoking in Andrology: State of Art. Andrology (2012); 1:e108.