

Relationship of Stress to Male Impotence

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Abstract: Sexual health and functionality have been proven to be vital factors affecting the overall health and well-being of each individual. Erectile Dysfunction is a complex disorder with various biophysical implications leading the individual into a state of chronic stress that further worsens the symptoms. This literature review presents a systematic review of articles covering stress and its relation to erectile dysfunction in males with emphasis on the past ten years in order to highlight new aspects and their resultant implications. The method used was a collective review of ten relevant medical journals – excluding those prior to 2008 – and additional reputable alternative sources using a combination of the key terms: “stress,” “erectile dysfunction” and “male impotence.” The results showed that many variables such as psychological disorders resulting from traumatic experiences (e.g. PTSD or depression), an individual’s method of coping with these experiences (which is influenced by their personality, gender, lifestyle, beliefs and values), combined with that individual’s overall mind set can play a part in erectile dysfunction. Such a condition – and the factors that can lead to it – require immediate attention, planning and implementation of coping strategies, rather than a lack of interest and even misdiagnosis in the early stages by some medical practitioners. Based inferences made from the results, some future perspectives were outlined and discussed.

Key words: Sexual health, Erectile Dysfunction, Male Impotence, Stress, Systematic Review, Biophysical Implications, Chronic Stress

I. INTRODUCTION

Stress is defined as the nonspecific response of the body to any demand made upon it.(Hales, 2011) While impotence, otherwise known as Erectile Dysfunction is the inability to get and maintain an erection necessary for a satisfactory sexual intercourse.(Dr Mandal, 2014) Occasional failure to attain or sustain an erection is a normal phenomenon, but when a man is unable to have or keep an erection in at least 25 percent of attempts, he is commonly regarded as having erectile dysfunction.(Funk & Wagnalls New World Encyclopedia, 2016)Impotence may result from conditions or situations that disrupt any part of this complex interplay of the nervous and circulatory systems. Causes of impotence thus include psychological factors such as stress, anxiety, guilt, depression and fear of sexual failure, as well as a wide range of physical factors.(Funk & Wagnalls New World Encyclopedia, 2016)

Stress is a known major factor of sexual dysfunction and chronic stress can lead to erectile dysfunction in males. Very few individuals are able to cope with stress and the effects it can have on the body and mind. This makes the importance of finding ways in which these individuals can free themselves from distress in order to prevent erectile dysfunction extremely relevant. Psychotherapy and behaviour modification may benefit men whose impotence stems from a psychological cause and may also help relieve anxiety among those being treated for a physical condition.(Funk & Wagnalls New World Encyclopedia, 2016)It is the norm of this post-modern society to turn a blind eye to the problems of others which leads to individuals going through various stages of stress, not having someone trustworthy to talk to or be there for them in their times of need. This feeling of isolation when undergoing chronic stress can lead to sexual dysfunction. The aim of this review is to provide evidence, using the latest content from relevant medical journals that stress is related to erectile dysfunction in males.

II. RESULTS AND DISCUSSION

Stress is your reaction to any change that requires you to adjust or respond. Stress can be caused by any change, whether good and bad. Your body reacts to these changes with physical, mental and emotional responses. Everyone experiences stress. Our bodies are designed to feel stress and react to it. It keeps us alert and ready to avoid danger. But, when stress persists, the body begins to break down and problems like erectile dysfunction can occur.(WedMD, 2017)Stress is a risk factor for cardiovascular events in men with vascular risk factors (VRFs) and is also associated with erectile dysfunction (ED) (Bocchio, et al., 2009)

Erectile dysfunction or impotence is a common health problem affecting men of all ages; it is a challenging problem that negatively affects the quality of lives of those affected.(Kumar & Malik, 2013) Sufferers and their partners face a lot of difficulties in various areas of life, including relationship problems. Erectile dysfunction is the inability to achieve or maintain erection of the penis during sexual intercourse (Massaccesi, et al., 2014)and according to (Ward, 2009), impotencies the inability to maintain an erection of sufficient rigidity to perform sexual intercourse.

III. RELATIONSHIP OF STRESS TO MALE IMPOTENCE

Erectile dysfunction requires interference with the co-ordination of one or more of vascular, neurologic, hormonal and psychological factors, with vascular being responsible in about 70% of cases. Erectile dysfunction has previously been an accepted consequence of aging, it is now recognized that organic causes play a much more significant etiological role. As a result it becomes a condition requiring a multi-factorial approach that would include androgen deficiency, lowered vitality, anxiety/stress levels, among many other factors.(Ward, 2009)

Using a Mood and Sexuality Questionnaire, with the added burden of stressful work environment an investigation was done on a group of men using the question “what happened to sexual interest and response when a) depressed and b) anxious/stressed?” They found a 42% decrease in sexual interest when depressed and a 28% decrease when anxious/stressed. (Ward, 2009)

According to the article written by (Galanakis, et al., 2015) other studies were done on a group of people assessing stress and sexual function. The results were as follows “In two studies investigating the relation among stress, timed intercourse and sexual dysfunction, men following a program of timed intercourse showed high percentages of sexual dysfunction (erectile, ejaculatory). Men with delayed ejaculation had more stress which was mainly imposed by timed intercourse. Stress and anxiety increased the frequency of erectile dysfunction in conjunction with the timed intercourse frequency. Obligatory coitus and compulsory sexual behaviour lead to stress and anxiety and furthermore to sexual dysfunctions, that is, erectile dysfunction in males.

Another study conducted by (Kumar & Malik, 2013) was carried out to study perceived stress (PS) and emotional intelligence (EI) and their interaction in individuals diagnosed with Erectile Dysfunction (ED) and their healthy counterparts. This cross-sectional study examined 100 individuals with erectile dysfunction and 100 healthy controls. Overall findings suggest that individuals with ED are significantly more stressed and have lower emotional intelligence than their healthy counterparts. Thus present study highlights the fact that it is equally important to treat stress in order to achieve better treatment compliance and management.

Previous studies have shown that patients with post-traumatic stress disorder (PTSD) have a higher incidence of sexual dysfunction.(Arbanas, 2010)A person diagnosed with post-traumatic stress disorder (PSTD) sex becomes almost impossible. John Radell – an Iraqisoldier – was interviewed about his sex life after his service in the army. He reported that sex was either physically impossible or emotionally unbearable. Sometimes he could not become erect at all, or if he could, sex might spark a flashback to that child soldier (a situation where he ejaculated while shooting a 12 year old boy soldier). “I’d see myself pulling a trigger on my wife’s head as I was getting ready to climax,” he says. “That destroyed the sexual relationship altogether for me.”(Tedesco, 2015)On the battlefield, a soldier has “a sense of total power over other people’s lives.” Back in civilian life, that disappears. “Then when they lose their ability to use their sexual organ, which to them represents who they are as a man, all [remaining] power is stripped from their identity,” (Tedesco, 2015) leading to severe depression – which worsens the situation.

There is growing interest among researchers in the role of oxidative stress (OS) in the pathophysiological mechanism of ED. The impairment of penile vascular function is associated with erectile dysfunction in a variety of vascular disorders characterized by a strong oxidative stress, including diabetes mellitus.(Massaccesi, et al., 2014)Oxidative stress is essentially an imbalance between the

production of free radicals and the ability of the body to counteract or detoxify their harmful effects through neutralization by antioxidants.(Dr Mandal, 2014)

A theoretical model for ED aetiology with anxiety and stress as primary causal agents was proposed by (Jern, et al, 2012) without describing empirical evidence for this direction of causality. However, another study has linked also linked anxiety to ED: “The results support that patients with migraine have a higher incidence of being diagnosed with ED, particularly in the patient with the comorbidity of anxiety.” (Wu, et al., 2016) In addition, somatization stress and anger have also been shown to correlate with ED. A study titled, “Increased risk of organic erectile dysfunction in patients with chronic fatigue syndrome: a nationwide population-based cohort study” proposes that chronic fatigue syndrome (CFS) – which can be caused by continuous stress – is associated with organic erectile dysfunction (organic ED) when combined with comorbidities inclusive of depression. In fact, the study showed that a “higher incidence of organic ED was observed in males with cardiovascular disease, diabetes mellitus, chronic kidney disease, depression, or anxiety for both CFS and non-CFS cohorts.” (Chao, et al, 2015) The study also purported that CFS might also cause deregulation of stress–response systems such as the hypothalamic-pituitary-adrenal axis, the autonomic nervous system, and the immune system – all of which can lead to an exacerbation of ED.

IV. CONCLUSION AND FUTURE PERSPECTIVES

This review has presented evidence from live cases as well as scholastic studies in support of the fact that distress and its associates stressors has a negative and even debilitating effect on sexual health, especially in men to the point of manifesting as erectile dysfunction / impotence which causes more distress thereby worsening the condition to create a vicious cycle – if left untreated. Since sexual health and functionality have been proven to be a vital factor affecting the overall health and well-being of each individual, it is clearly essential to practice proper stress management in order to enjoy good health and achieve overall wellness for benefit of both partners in the relationship. Even though this study is about men, it is quite obvious that a wife will also become stressed if her husband cannot satisfy her sexually – just like John Radell this will have negative ripple effects on marriage and family life.

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