



SEXUAL DYSFUNCTION IN DIFFERENT DOMAINS AFFECTING HYPERTENSIVE PATIENTS- TIME TO ACT

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ABSTRACT

Sexual Dysfunction due to Hypertension and antihypertensives is well established in literature. Not only Erectile Dysfunction in males or lack of Sexual Desire in both genders are the only outward manifestations. Many other domains are equally affected that impair an individual from leading a sexually satisfying life. These become the core behind many psychiatric illnesses in them due to the its stress provoking capacity and impairments in other aspects of life too. Developing nations like India are mostly affected in this regard. Detailed longitudinal study and response to treatment in Indian scenario is the current need specially in Indian scenario.

KEYWORDS- Sexual Dysfunction, Hypertension, Antihypertensive, Domains

INTRODUCTION

Hypertension (HTN) is a leading risk factor for mortality mostly because of its high prevalence and associated risk of cardiovascular diseases^[1]. Almost 25% of the world's adult population is estimated to have arterial hypertension by 2025. The estimated number is close to 1.5 billion^[2]. Abnormalities of the vessels of our body both structurally and functionally are mainly associated with HTN. Long-term HTN causes blood vessel damage in general, the most frequent reason being vascular diseases^[3]. Thus vessels in the genital region are also involved^[4]. Reduced blood flow (secondary to hypertensive arteriosclerosis due to raised blood pressure) to the neural, systemic components of genitalia, subsequently leads to sexual dysfunction (SDys)^[5,6].

For the efficient functioning of vital organs such as the heart, brain and kidneys having systolic and diastolic pressure within normal level is important. WHO data suggest that, globally, hypertension is accountable for about 17 million

deaths per year which is about 1/3 rd of all deaths occurring yearly in the world. The complications arising out of hypertension are the reason behind 9 million deaths worldwide each year^[7-12]. WHO stated in 2008 that about 40% of the adult population in the world have been diagnosed with hypertension. The number of cases rose from 600 million in 1980 to a staggering 1 billion in 2008. The prevalence in the African areas was maximum in the world with 46% of adults diagnosed with high blood pressure. The lowest prevalence was seen in American region, which was still a prominent 35% of the adults^[13,14].

Estimate of erectile disorder ranges from 0.4% to 37% in general treatment settings^[15]. There is broad fluctuation in differences among assessment criteria, risk issue such as advanced age, medications^[16], diabetes and hypertension^[17]. Current rates of erectile dysfunction varies from 1% to 53%^[18,19,20] in sexuality clinics. Rosser et al.^[18] reported a lifetime estimate of 40% having problems getting an erection and 46% having problems in maintaining erection.



One year prevalence in general population range from 0% to 10%^[19,20]. As age increases there is rise in prevalence of erectile problems, comorbidities like uncontrolled hypertension, diabetes mellitus. History of smoking, tobacco consumption also increases its likelihood^[21-24]. Studies done in other population estimated prevalence of 9% to 73%^[25,26]. Indian studies show that erectile dysfunction (Eds) affects 15% to 24% of males^[26].

Individual's personality includes sexuality. This is influenced by many factors that includes gynecological disorders, medical disorders, psychological state, and some drugs^[30]. Indian women mostly regard intercourse as just a mean of reproduction. In 2001, it was stated by Berman et al. that with increasing age, there is rise of Female Sexual Dysfunction (FSD)^[27]. Decline in hormones as the age goes forward toward menopause is one of the reason behind this. Arousal disorders are related to urogenital atrophy during menopause^[28]. In a study done by Fajewonyomi et al. this dysfunction in females was mostly found in 26 to 30 years^[28]. Effect of age on sexual life depends on various other factors such as psychological, medical illness, and drugs^[29]. Fajewonyomi et al. showed that a population with higher educational status had more occurrence of FSD (43.4%) in comparison to those having no primary education (7.3%)^[30].

Sexual aspect of marriage also suffers negatively. Patients married more than 16 years had a prevalence of 40% FSD. Increased time of marriage leading to reduced frequency of intercourse supports this^[71,31].

In females, the prevalence of SDys is 55.55%.

Quality of life and individuals personality, both are affected by such dysfunctions^[75,32].

DISCUSSION

HTN itself and its treatment which includes various classes of antihypertensive drugs, which could contribute to SDys due to their side effects^[7-9]. Certain antihypertensive medications especially the diuretics and beta blockers may have undesirable effect on the sexual functioning^[33,34]. So, SDys may be because of the natural progression of the disease itself and/or the antihypertensive medications^[33,35].

SDys is reported to be more prevalent when other cardiovascular risk factors coexist^[36]. HTN in both males and females^[37,38,39] have also been linked, with some reporting that HTN can cause decreased lubrication and dysfunction in orgasm in females^[40]. HTN is also one of the most common comorbidities in people having problems with erection^[41,42,43].

According to guidelines issued in 2013 by the European Society for Hypertension (ESH) and the European Society for Cardiology (ESC), there is a prevalence of hypertension in the general

population of approximately 30–45%^[44]. There is 44% female representation in Randomized Control Trial^[45]. Also, early development of problems in erection can predict an asymptomatic cardiovascular disease^[46,47]. It was recommended that SDys should be routinely evaluated in hypertensive women by a proper sexual history, and managed sensitively^[48]. Hypertensive women are more vulnerable to experience dysfunction, thus screening for it ought to be included in clinical care guidelines^[49].

CONCLUSION

Thus longitudinal data is sparse, and thus, a study to find out the impact of essential HTN in both genders is warranted. As outcome of the research, we can find the prevalence of SDys in different domains. This data will be useful giving particular focus on that domain during routinely examining cases of HTN with SDys. Proper screening and psychosexual counselling of the hypertensive patients by focusing on that domain can be done to decrease anxiety and depression arising because of improper fulfilment of sexual life. By following up

these patients we will get a detailed history of the effect of HTN and effectiveness of therapy on these domains. This information can lay the foundation for future studies for studying efficacy of individual antihypertensive medications in different domains of sexual function. Better treatment of these side effects will increase compliance to antihypertensive medications.

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