Sexual Dysfunction and Cardiovascular Disease in the Primary Health Care Setting

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Introduction and Aims

Sexual function is a complex process involving both biologic and psychological factors. About 40–45% of women and 20–30% of men have at least one manifest sexual dysfunction (SD). SD is known to increase in prevalence with increasing age and severity of cardiovascular disease (CVD) in both sexes. SD in an otherwise asymptomatic person may be a marker of underlying undiagnosed CVD. We now recognize that CVD and SD in both sexes share many of the same risk factors and very commonly coexist. In fact, erectile dysfunction (ED) frequently manifests itself 2–3 years before the consequences of coronary atherosclerosis and is important considering that nearly half (48%) of all deaths in Europe are due to CVD (54% of deaths in women and 45% of deaths in men). This analysis aims to explore the associations between SD and cardiovascular risk factors.

Results

Patients’ socio-demographic characteristics: Sample of 323 participants, 180 women, mean age 47.67±16.84 years. Women are in average 10 years younger than men and have less work inactivity that men (17.2%, 45.6% respectively). Educational level and marital status are similar for both sexes.

Cardiovascular Risk Factors and established Cardiovascular Diseases: Regarding to some cardiovascular (CV) risk factors, results are similar in both sexes: BMI≥25 (60.1%, 51.7%); increased waist circumference (35.4%, 40.4%); Diabetes (16.2%, 10.6%); Hypertension (38.5%, 28.7%) and Dyslipidemia (34.3%, 33.1%) in men and women, respectively. There are more women who never smoked than men (76.3% to 36.5%, respectively) although the percentage of current smokers is similar (23.4% in men, 17.0% in women). There is a higher percentage of men indicating alcohol overuse (35.5% in men, 6.7% in women), and more women indicating physical inactivity (28.0% in men and 48.3% in women). The prevalence of established CVD is similar in men and women: Coronary artery disease (CAD) (1.4%, 2.3%); Stroke (7.1%, 2.2%). Heart Failure (HF) (2.1%, 2.4%) and Myocardial Infarction (MI) (3.6%, 2.8%). There are fewer men apparently healthy than women (36.8%, 52.3%, respectively, no statistical significance).

Sexual Function and Satisfaction: Around 27% (N=83) of men and 34% (N=61) of women indicated “no sexual activity” in the IIEF and FSFI indexes or didn’t complete the answers and were therefore excluded from the sexual function analysis. Considering IIEF and FSFI total scores, prevalence of SD is 37.1% (N=38) and 42.0% (N=50), in men (ED) and women (non-specified), respectively. Age and low educational attainment (results not shown) tend to be associated to higher levels of SD and intercourse satisfaction (Table 1 and Table 2).

Finally, our results stress that both male and female sexual function tend to worsen when there is an increase of combined CV risk factors. These findings reinforce the relationships between SD and CVD, and poor sexual function was expected, if it wasn’t for the shortness of our sample. However, even without statistical significance, all CV disease were associated with a decrease in sexual function in both sexes, and a decrease sexual satisfaction in men indicating that prevention and management of these are important for male and female sexual health (results not shown).

Discussion and Conclusions

Our study supports the evidence that there are common risk factors for SD in men and women such as socio-demographic, general health and CV risk factors. A stronger correlation between CVD disease and poor sexual function was expected, if it wasn’t for the shortness of our sample. However, even without statistical significance, all CV disease were associated with a decrease in sexual function in both sexes, and a decrease sexual satisfaction in men indicating that prevention and management of these are important for male and female sexual health (results not shown).

Although there are some exceptions, CV risk factors such as overweight and increased waist circumference, and also established CVD, are associated with a significant poorer sexual function and satisfaction when comparing with apparently healthy individuals. Figure 1 illustrates that each risk factor has a negative impact on sexual function for both men and women. Clustering of more than one CV risk factors is correlated with a decrease in sexual function in both sexes, and a decrease sexual satisfaction in men indicating that prevention and management of these are important for male and female sexual health (results not shown).

Table 1. Erectile Dysfunction and Intercourse Satisfaction by Socio-demographic and Health Conditions Characteristics

Table 2. Female Sexual Function Index and Satisfaction by Socio-demographic and Health Conditions Characteristics

Methods

Cross-sectional study among male and female patients of two Lisbon Primary Health Centres (PHC), aged between 18-80 years old, aspiring to be sexually active, and with a clinical record. Patients’ questionnaires collected information concerning socio-demographics’ variables, lifestyle, medical history, knowledge and beliefs about SD and their treatments and patient-physician relationship. Structured self-administered questionnaires were also applied to the general practitioners (GPs) working in the participating PHC. Patients were asked to complete auto-evaluation forms concerning the Index of Erectile Function (IEF) and the Female Sexual Function Index (FSFI). Those with IIEF<25 and FSFI<30 were considered to have SD.

Figure 1: Prevalence of Erectile Dysfunction and Female Sexual Dysfunction by Cardiovascular Risk Factors

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