26026 - Exploring the Prevalence and Risk Factors of Erectile Dysfunction in Men: A Cross-sectional Study from a Health Education Institution.

Alice Carvalhais[1], Thuane Da Roza[2], Margarida Ferreira[3]

[1]LAETA, INEGI, Porto, Portugal; CESPU-IPSN, Paredes, Portugal, [2] Laboratório de Biomecânica da Universidade do Estado de Santa Catarina, [3]Physical and Rehabilitation Medicine Department, Unidade Local de Saúde do Alto Ave, Guimarães, Portugal

Hypothesis / aims of study

Erectile dysfunction (ED) is defined as the complaint of inability to achieve and sustain an erection firm enough for satisfactory sexual performance and is one of the most common types of sexual dysfunction. Prevalence varies across different age groups, populations, and geographical regions (1). Risk factors associated with ED may include medical conditions (e.g., diabetes, cardiovascular disease), psychological factors (e.g., depression, anxiety), lifestyle factors (e.g., smoking, alcohol consumption), hormonal factors, and medication side effects (2). ED can impact negatively intimate relationships and quality of life. The aim of this study was to determine the prevalence of ED and the potential risk factors among men from an academic institution.

Study design, materials and methods

- Sociodemographic, lifestyle, and health conditions
- Urinary incontinence symptoms ("Do you experience involuntary loss of urine?")
- Anal incontinence symptoms ("Do you experience involuntary loss of gas or feces?")
- ED (International Index of Erectile Dysfunction questionnaire)

✓ For analysis, only men reporting sexual activity within the past 4 weeks were included.

ETHICS

Polytechnic Health Institute of North (18/CE/IPSN/2021

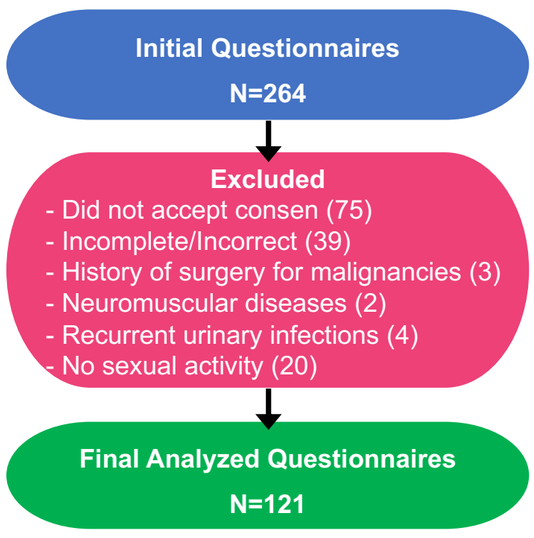

Figure 1. Participant Selection Flow

Index of Erectile Dysfunction Questionnaire

Domains	Questions	Score range	Abnormal
Erectile Function	1-5 &15	0-5	<25 points
Orgasmic Function	9-10	0-5	<9 points
Sexual Desire	11-12	1-5	<9 points
Intercourse Satisfaction	6-8	0-5	<13 points
Overall Satisfaction	13-14	1-5	<9 points

Sample characteristics

Age (mean± standard deviation) 34 ± 13.5 years
Body Mass Index (mean± standard deviation) 25 ± 3.2

Table 1. Health related sample characteristics

	n (%)
Diagnosis of Health conditions	
Cardiac illness	0 (0.0)
Hypertension	8 (6.6)
Diabetes	1 (0.8)
Psychologic	5 (4.1)
Symptoms of pelvic floor dysfunction	
Urinary incontinence (yes)*	8 (7.4)
Stress urinary incontinence	2 (1.7)
Urgency urinary incontinence	5 (4.1)
Mixed urinary incontinence	1 (0.8)
Anal incontinence	
Loss of gases	11 (9.1)
Loss of fezzes	1 (0.8)
Erectile dysfunction (yes) (IIEF)	13 (10.7)
Mild erectile dysfunction	3 (2.5)
Mild to moderate erectile dysfunction	2 (1.7)
Moderate erectile dysfunction	8 (6.6)

IIEF, International Index of Erectile Function;* 1 missing value

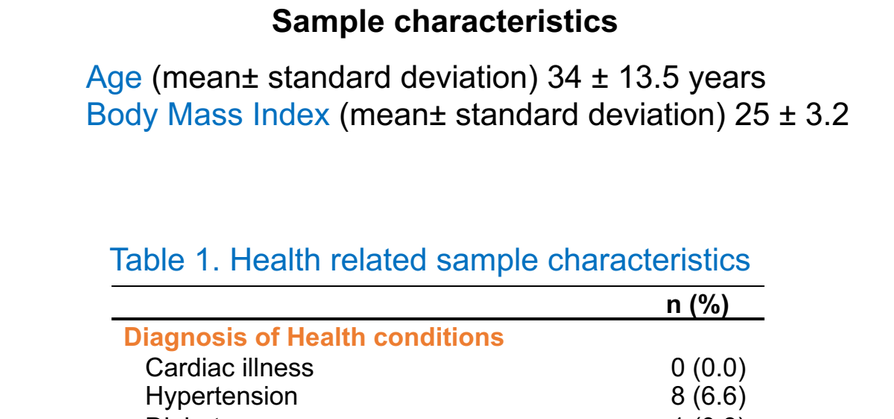

Figure 2. Social and lifestyle related sample characteristics

Results and interpretation

Table 2. Association between erectile dysfunction with social habits and health issues.

	*p-value	Effect size
Civil status	0.598	0.092
Regular exercise practice	0.144	0.133
Regular smoking habits	0.843	0.018
Regular alcoholic beverages consumption	0.117	0.142
Hypertension	256	0.150
Psychologic condition	0.428	0.072
Sexual orientation	0.890	0.072

*Cramer´s V

No association was observed between potential risk factors and ED

Table 3. Association between erectile dysfunction with urinary and anal incontinence (chi-square test)

	Erectile Dysfunction n (%)	no Erectile Dysfunction n (%)	p-value
Urinary incontinence	1 (0.8)	7 (5.8)	0.272
No Urinary incontinence	12 (9.9)	101 (83.5)	
Anal incontinence	1 (0.8)	10 (8.3)	0.853
No Anal incontinence	12 (9.9)	98 (81.0)	

Chi-square tests did not demonstrate any association between ED and urinary or anal incontinence

In our sample, 10.7% of men self-reported experiencing ED. Various factors contribute to alterations in the components of the erectile response, encompassing organic, relational, and psychological aspects. However, our study did not identify any significant relationship between ED and traditional risk factors documented in the literature, such as cardiovascular problems, diabetes, hypertension, smoking, and alcohol consumption. It is noteworthy that the relatively low prevalence of these health conditions among participants may have influenced our findings. Additionally, the high proportion of participants who reported regular exercise and attained a superior level of education may have also influenced the results, given that regular physical activity has been shown to reduce the risk of ED, while lower levels of education have been associated with higher rates of ED. Psychological factors, including depression, anxiety, and partner-related difficulties, are recognized contributors to ED. This study raised questions about psychological issues diagnosed by a physician, which could lead to a underdiagnoses cases. Also, partner-related difficulties were not analyzed in our study.

Concluding message

Further research is warranted to embrace a comprehensive biopsychosocial approach to understanding ED, which encompasses biological, psychological, and social factors. While our study did not identify specific risk factors for men with ED, a more thorough evaluation may help identifying a high-risk subgroup needing a different therapeutic approach. Additionally, other psychosocial stressors, such as chronic stress, anxiety, depression, and work-related stress, should also be assessed to provide a more holistic understanding of the condition.

References

(1) McCabe MP, Sharlip ID, Lewis R, et al. Incidence and Prevalence of Sexual Dysfunction in Women and Men: AConsensus Statement from the Fourth International Consultation on Sexual Medicine 2015. J Sex Med.2016;13(2):144-152. doi:10.1016/j.jsxm.2015.12.034.
(2) McCabe MP, Sharlip ID, Lewis R, et al. Risk Factors for Sexual Dysfunction Among Women and Men: AConsensus Statement From the Fourth International Consultation on Sexual Medicine 2015. J Sex Med.2016;13(2):153-167. doi:10.1016/j.jsxm.2015.12.015.