

Multifactorial Issues Associated with Sexual Dysfunction in Men

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Introduction

- Male sexual dysfunction (erectile dysfunction, premature ejaculation, low libido) is common and multifactorial, involving neurologic, endocrine, and vascular systems, with significant impacts on quality of life, relationships, and mental health¹
- Psychological and environmental factors play a major role, with studies demonstrating associations between sexual dysfunction and stress, depressive symptoms, and external stressors (e.g., fertility-related stress, COVID-19 pandemic)²⁻⁴
- Erectile dysfunction (ED) is a predominant contributor, driven by vascular and neurogenic mechanisms, and is strongly associated with comorbidities such as diabetes, hypertension, obesity, cancer, and advancing age⁵
- Lifestyle factors are modifiable contributors, and identifying behavioral patterns (e.g., smoking, alcohol use, physical inactivity, stress) may allow targeted interventions to improve sexual health and broader health outcomes.

Aims and Objectives

- To understand the demographics of the participants who completed the Michigan Institute of Urology’s Men’s Health Questionnaire. The Men’s Health Foundation since its inception has been dedicated to the efforts to assist the men in the greater Detroit metropolitan area to become advocates for their own health.
- To explore the relationship between behavioral/lifestyle choices of men presenting with sexual dysfunction without any other comorbidities (Cardiovascular Disease, Stroke, Diabetes, obesity, cancer)

Methods

Cross-Sectional Survey Based Study:
Completed Health Questionnaires from Men’s
Health Event 2023 (Detroit, MI)
(n ≈ 711 participants)

- Study Population Selection
- Inclusion: Men ≥18
 - Exclusion: Incomplete Responses, Women, Age <18 years

- Data Collection/Structured Questionnaires assessing:
- Demographics
 - Sexual Function (Activity Frequency, Libido)
 - Lifestyle Behaviors

- Statistical Analysis:
- Descriptive Analysis to characterize cohort
 - Chi-Squared tests to assess associations between lifestyle factors and sexual function
 - Sensitivity analysis excluding patients with select comorbidities associated with decreased sexual function (hypertension, heart disease, diabetes, kidney disease, cancer, depression, anxiety)

Results

Table 1. Demographics

Characteristic	Value (N=711)
Race	
Black/African American	351 (49.4%)
White/Caucasian	312 (43.9%)
Asian	18 (2.5%)
Other / Multiracial	30 (4.2%)
Ethnicity	
Non-Hispanic or Latino	680 (95.6%)
Hispanic or Latino	31 (4.4%)
Age	
≤40	111 (15.6%)
41–50	94 (13.2%)
51–60	201 (28.3%)
61–70	196 (27.6%)
71–80	100 (14.1%)
≥81	9 (1.3%)

Table 2. Association Between Lifestyle Factors and Sexual Desire/Libido

Lifestyle Factors	Full Cohort p-value	Excluded Cohort p-value
Alcohol Intake	0.2345	0.7426
E-cigarette Use	0.0073* (↑)	0.0360* (↑)
Marijuana Use	0.0254* (↑)	0.6584
Resistance Training (>3x/week)	0.0001* (↑)	0.2273
Aerobic Exercise (>3x/week)	0.0045* (↑)	0.0445* (↑)
Red Meat Consumption (>3x/week)	0.0026* (↓)	0.1483
Smoking	0.7237	0.9955
Fast Food (>3x/week)	0.0881	0.0049* (↑)
Caffeine Intake	0.0595	0.3039
Sleep Duration	0.0087* (↑)	0.8132
Spiritual/Religious	0.7613	0.4320
Prayer/Meditation	0.3386	0.4987
Chi-square test; significance defined as p < 0.05 * Indicates statistically significant, ↑ indicates positive correlation, ↓ indicates negative correlation		

Table 3. Association Between Lifestyle Factors and Sexual Activity Frequency

Lifestyle Factors	Full Cohort p-value	Excluded Cohort p-value
Alcohol Intake	0.0157* (↑)	0.0605
E-cigarette Use	0.0131* (↑)	0.2455
Marijuana Use	0.0436* (↑)	0.1194
Resistance Training (>3x/week)	0.0014* (↑)	0.1332
Aerobic Exercise (>3x/week)	0.0160* (↑)	0.1162
Red Meat Consumption (>3x/week)	0.1121	0.0126* (↓)
Smoking	0.0792	0.2603
Fast Food (>3x/week)	0.2853	0.2076
Caffeine Intake	0.1539	0.1165
Sleep Duration	0.3456	0.7936
Spiritual/Religious	0.6134	0.3557
Prayer/Meditation	0.5395	0.2739
Chi-square test; significance defined as p < 0.05 * Indicates statistically significant, ↑ indicates positive correlation, ↓ indicates negative correlation		

Summary of Findings

Several lifestyle factors were associated with both sexual activity frequency and libido on bivariate analysis, including substance use and exercise-related behaviors. However, after exclusion of patients with comorbidities, most associations were attenuated. For sexual activity frequency, only red meat consumption remained significant (p=0.0126), while for libido, e-cigarette use (p=0.0360), aerobic exercise (p=0.0445), and fast food consumption (p=0.0049) remained significant. These findings suggest that observed relationships between lifestyle factors and sexual function may be influenced by underlying health status.

Conclusions

This study demonstrates that modifiable lifestyle behaviors are meaningfully associated with male sexual function. The attenuation of several associations following comorbidity exclusion suggests that men with underlying conditions may benefit most from targeted lifestyle intervention as a non-pharmacological adjunct to standard management of sexual dysfunction. Notably, red meat consumption more than three times per week was independently associated with decreased sexual activity frequency after comorbidity exclusion, highlighting the relevance of diet in men without traditional risk factors. Resistance training, aerobic exercise, and dietary modification emerge as the most clinically actionable recommendations for sexual health management.

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