

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. Results: Prior to propensity score matching, men with COVID-19 had an average age of 47.1 + 21.4 years, 13% had diabetes mellitus, and 27% had hypertension, while in men without COVID-19, average age was 42.4 + 24.3 years, 7% had diabetes, and 22% had hypertension. After propensity score matching, we compared 230, 517 men with COVID-19 to 232,645 men without COVID-19 and found that COVID-19 diagnosis was significantly associated with ED (OR 1.120, 95% CI 1.004-1.248, p=0.0416). Strengths include large sample size and adjustment for confounding variables. Limitations include lack of data regarding ED (mild vs moderate vs severe) or COVID-19 infection severity.

Conclusions: Our study showed that there is an increased risk of developing ED post-COVID infection, suggesting possible long-term effects due underlying endothelial dysfunction. The exact mechanism of how COVID-19 virus leads to erectile dysfunction remains to be elucidated. Disclosure: No

141

ASSOCIATION OF POLY-TOBACCO USE WITH ERECTILE DYSFUNCTION: FINDINGS FROM THE POPULATION ASSESSMENT OF TOBACCO AND HEALTH (PATH) STUDY

<u>Raheem, O¹</u>; Shah, T²; Morenas, R¹; El-Shahawy, O³ $\overline{^{T}}$ Tulane University; ²New York University; ³NYU

Introduction: The tobacco use landscape has shifted over time to include two or more tobacco products (i.e. "poly-tobacco" use). Tobacco smoking remains independently associated with erectile dysfunction (ED); however, data on the patterns of multiple tobacco products use on men's sexual health, including ED, are limited.

Objective: We sought to systematically evaluate the effects of poly-tobacco use on ED using nationally representative data.

Methods: Data from the Population Assessment of Tobacco and Health (PATH) survey wave 4 (December 2016- January 2018) was examined. Those who responded, "sometimes or never" to the question "Ability to get and keep an erection adequate for satisfactory intercourse?" were classified as having ED. Tobacco users were classified as mono-, polyand non- users based on the past 30-day tobacco products use. Multivariate logistic regression models were used to identify association of tobacco use with ED among a restricted sample that included only men aged 20-65 who did not report any prior cardiovascular diagnosis. We adjusted for several covariates including sociodemographic characteristics, diabetes, body mass index, mental health status, and physical exercise.

Results: Included in the study were adult males, aged 20-65 years or older, who responded to the question assessing ED between December 2016 to January 2018 (N=8,651). Among the study population, 19.5% participants were mono-tobacco users and 16.1% were polytobacco users. The proportion of ED for the sample population was 8.2%; prevalence among mono-tobacco users was 1.7% and polytobacco users was 1.4%. Compared to non-users, current poly-tobacco users were more likely (adjusted OR (aOR)= 1.43; 95% CI=0.99, 2.07;p<0.05) to report having ED.

Conclusions: With the shift in the landscape of tobacco products that is associated with increasing prevalence of poly-tobacco products use, adult men and clinicians should be aware of its potential impact. Future studies should evaluate the longitudinal effect of multiple tobacco and tobacco use trajectories on the development of ED among adult men.

Disclosure: No

142

THE EFFICACY OF WRITTEN SYMPTOM QUESTIONNAIRES FOR THE MANAGEMENT OF ERECTILE DYSFUNCTION *Bhalla, R; Loucks, B; Comola, G; Johnsen, N Vanderbilt University Medical Center*

Introduction: The use of written screening tools and symptom questionnaires within the field of urology is widespread. Urologists regularly utilize such tools to help navigate properative counseling, understand the severity of a patient's symptoms, and guide clinical management. Self-administered screening questionnaires however require a baseline level of health literacy and comprehension in order for the results to be considered reliable. Prior work has shown that patient education and health literacy levels significantly impact the results of self-administered American Urological Association (AUA) symptom index questionnaire, which results in misclassification of voiding symptoms and potentially limits access to appropriate care. The International Index for Erectile Function (IIEF-5) is a previously validated self-administered questionnaire that is used to assess a patient's current erectile function. We hypothesize that men with lower health literacy and lower education levels are more likely to demonstrate a decreased understanding of the IIEF-5 and increased rates of symptom misclassification.

Objective: The aim of our project is to assess the frequency of poor understanding of the IIEF-5 and to determine if patient education and health literacy impact self-administered versus verbally administered IIEF-5 questionnaires.

Methods: In this pilot study, we prospectively enrolled consecutive, literate, English-speaking patients seen in an academic urology clinic for various complaints. Patients completed a self-administered, written IIEF-5 questionnaire per standard clinic protocol, and were subsequently re-administered the same IIEF-5 questionnaire verbally by a single trained researcher. The researcher answered patient questions and clarified questionnaire items as needed, as well as obtained basic demographic information related to education, health literacy, and race. Responses were compared by calculating the change in overall IIEF-5 scores between written and verbally administered instruments. Health literacy was determined utilizing the Brief Health Literacy Screen (BHLS), a validated health literacy tool.

Results: A total of one hundred consecutive men were enrolled into this pilot study. The population was primarily Caucasian (83%) with 76% of men having some form of college education or higher level education. The median written IIEF-5 was 14 (IQR: 5, 23) while the median verbal IIEF-5 was 14 (IQR: 5, 23), p=1.00. The median delta IIEF-5 was 0 (IQR: -2, 0). The median BHLS was 14 (IQR: 12, 15). On multivariable model evaluating for the impact of BHLS and education level on delta IIEF-5 while adjusting for age, education level, and race, BHLS (p=0.09) and education level (p=0.23) were not significant.

Conclusions: In this pilot study, there was no significant variance in overall scores when comparing the written to verbally administered IIEF-5 questionnaire. In contrast to prior studies evaluating the efficacy of other urologic symptom questionnaires, BHLS and education level were not significantly associated with changes in overall IIEF-5 scores. Disclosure: No

143

USER CHARACTERISTICS OF UNIQUE MEN'S HEALTH WEBSITE

Alom, M¹; Collins, S¹; Nelson, K¹; Carlson, S¹; Tentis, E¹; Helo, S¹; Ziegelmann, M¹; Trost, L²; Kohler, T¹ ¹Mayo Clinic; ²Male Fertility and Peyronie's Clinic

Introduction: Covid-19 has helped drive all forms of medicine away from traditional brick and mortar medical interactions. Given the availability of

online services to obtain treatments for ED, we developed a website to facilitate patient education, triage and men's health appointment scheduling.

Objective: We sought to assess characteristics of men who utilized a novel website to treat their ED.

Methods: We report on 50 patients who ultimately booked and attended appointments (video or in person) for erectile dysfunction. Patients found our website through our institution's main informational ED pages or through youtube links from our men's health video playlist library. Patients create an institutional account and are then asked a series of MD created questions designed to streamline patient triage and complete the majority of chart documentation ahead of the appointment. Patients are then sent videos relevant to their condition and future appointment options.

Results: 2300 users investigated the ED portion of the website with 1.8% of patients ultimately following through with an appointment. 13% of patients who explored the ED portion of the site created a user account that allows a questionnaire to be taken. 90% of men who began the ED questionnaire completed with a mean time of 11 minutes. 52% of men offered an appointment based on their responses completed the patient scheduling form. 71% of traffic was on mobile devices with 29% on desktop/tablet. Site use by time of day is shown in figure 1. Mean age of patients was 53. 92% of patients had ED that occurred > 6 months. Mean SHIM score was 8.2 (IQR 4-12). 80% of participants had both desire and opportunity for sexual activity, 20% did not meet both criteria and thus SHIM scores were less valid for these men. Of the users 28% had never tried pde5s, 32% had partial success with pde5s, 24% could not tolerate or afford pde5s and 42% had unsatisfactory results with pde5s. PDE5 naïve patients were seen by an internal medicine MD specializing in men's health, 10 were seen by surgeons as they requested IPPs and the rest were seen by a combination of men's health APPS and urology attendings for second line treatments and penile doppler. Interestingly, 66% of men were interested in undergoing penile doppler to better understand the etiology of their ED. Hypertension (40%) and diabetes (22%) were the most common medical comorbidities. 36% of the cohort had a strong family history of cardiac disease.

Conclusions: Men with ED can be effectively triaged through a website application. Most men with pde5 refractory ED wish to pursue penile doppler. The majority of patients seen had watched educational video material ahead of time, facilitating a more sophisticated and streamlined patient interaction.

Disclosure: No

Images:

Men's Health Users by Hour of Day



144

ANALYZING THE IMPACT OF DIABETES ON ERECTILE FUNCTION RECOVERY AFTER RADICAL PROSTATECTOMY

<u>Martinez, J Flores;</u> Jenkins, LC; Benfante, N; Nelson, CJ; Schofield, E; <u>Mulhall, JP</u>

MSKCC

Introduction: Diabetes (DM) is a known risk factor for ED. The impact of DM on erectile function recovery (EFR) after radical prostatectomy (RP) is poorly understood.

Objective: We aimed to assess the impact of DM on the EFR after RP.

Methods: Men who had RP with ≥ 2 years follow-up constituted the study population. EFR was assessed using International Index of Erectile Function, Erectile Function Domain (EFD) score pre-RP and at 2 years post RP. ADT and radiation therapy before or after RP were exclusions. Demographics, comorbidities, pathological parameters were recorded. We performed univariate and multivariate logistic regression assessments to evaluate predictive factors, including DM, patient age, nerve sparing status (NSS) scored between 1 (preserved) to 4 (resected) for each side, and comorbidity profile, associated with poor EFR post-RP.

Results: 2024 men were included. Mean age at RP was 61.3 ± 7.1 years. Median baseline and 2-year EFD scores were 27 (IQR = 19-30), and 13 (IQR = 5-25). 10% had DM with a mean pre-RP hemoglobin A1c of $6.6\pm1.3\%$. 44% had hypertension, 51% dyslipidemia, 14.5% obstructive sleep apnea, 5% history of coronary artery disease, 8% were current and 34% former smokers. 38% reported two or more comorbidities pre-RP. Median Gleason sum was 7. Nerves were preserved bilaterally in 77% and unilaterally in 16%. Median NS score was 3 (IQR 2-4). Median EFD scores at 2 years with and without DM were 7 (IQR 3-16), and 14 (IQR 5-25), respectively (p<0.001). At 2 years, in men with and without DM, the proportion with EFD \geq 24 was 14% and 32% and EFD \leq 10 was 63% and 42% respectively.

Conclusions: In our cohort, DM was a significant predictor of lower EFR at 2 years post-RP.

Disclosure: No

Images:

Predicting 24-month EFD score	≥24		
	OR	95% CI	p-value
Age (per year decrease)	0.95	0.93-0.96	<0.001
NS score (per point decrease)	0.71	0.65-0.79	<0.001
BaselineEFD(per point increase)	1.13	1.11-1.16	<0.001
DM (Yes vs No)	0.51	0.32-0.81	0.004
Predicting 24-month EFD score	≤10		
	OR	95% CI	p-value
Age (per year decrease)	1.07	1.05-1.09	<.001
NS score (per point decrease)	1.36	1.25-1.48	<.001
Baseline EFD (per point increase)	0.92	0.91-0.93	<.001
DM (Yes vs No)	1.60	1.11-2.29	0.011