

# Veterans' Satisfaction With Erectile Dysfunction Treatment

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Limited alternatives and lack of knowledge of behavioral methods shown to improve erectile functioning lead many veterans to continue erectile dysfunction treatment despite a lack of satisfaction.

A majority of men (70%) aged  $\geq 70$  years report erectile dysfunction (ED) in primary care settings.<sup>1</sup> Further, the cost of ED medication is increasing: nationally, the VA spent \$71.7 million on ED medications in 2013, triple the amount from 2006,<sup>2</sup> despite a 2011 VA mandate limiting ED medication prescriptions to 4 doses per month per veteran.<sup>3</sup> Unfortunately, although ED is common and costly, only about 12% of men in the community report being asked about their sexual health by their primary care provider (PCP) in the past 3 years.<sup>4</sup> Further, little emphasis seems to be placed on preventive care. For example, men with ED in primary care clinics are unaware of ED risk factors such as hypertension, smoking, and obesity; indeed, only 17% of a large community sample could name 1 risk factor for ED.<sup>5</sup> This is problematic because diet and exercise improve erectile functioning, yet men may not realize they can reduce ED through behavioral and lifestyle change.<sup>6</sup>

In addition, there is little research that investigates veterans' satisfaction with ED treatment and its effectiveness. The taboo nature of talking about erections and sexual health may partially relate to the lack of research. When surveyed, PCPs noted that they do not talk about ED routinely with patients for reasons that include time constraints, lack of experience managing sexual problems, viewing ED medication as a lifestyle drug, perceiving ED as a nonserious concern, discomfort discussing the topic for both male and female PCPs, and viewing ED discussions as the responsibility of providers of the opposite gender.<sup>7-9</sup>

Given the dearth of ED research within the veteran population, the purpose of the current study was to (1) explore the level of treatment satisfaction of veterans prescribed an ED medication, phosphodiesterase type 5 inhibitor (PDE5); (2) assess patients' perception of discussions with their PCPs about sexual health concerns; and (3) provide preliminary data on veterans' knowledge of ED risk fac-

tors and identify possible areas for preventive education. This study was intended to highlight areas for further investigation to improve ED treatment satisfaction among veterans.

## METHODS

The authors conducted an anonymous survey with veterans who were prescribed an ED medication within the previous 12 months. In 2012, researchers obtained 8,000 names of veterans prescribed a PDE5 medication at the Clement J. Zablocki VA Medical Center (CJZVAMC) in Milwaukee, Wisconsin, and randomly selected 1,000 persons to mail a research survey to be returned anonymously. Three hundred ten surveys were returned, a 31% response rate, which was similar (32%) to a comparable large ED survey study, in which the participants were randomly selected to participate and also were not recruited by their PCP.<sup>10</sup> Because 13 participants were excluded due to incomplete surveys or obtaining primary medical care services outside the VA, the current sample consisted of 297 participants. The CJZVAMC institutional review board approved the study in March 2013, and de-identified data were collected from March 2013 to March 2014.

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The authors assessed demographics and treatment information, including whether veterans had talked with their PCP about sexual concerns.

Of the 297 participants, 55% were aged > 65 years. Racial/ethnic groups reflected the veteran population at CJZVAMC, with 78% identifying as European American, 17% as African American, 2% as Hispanic American, 2% as biracial, and 1% as Asian American or American Indian. Eighty-one percent were identified as Christian, and 10% reported no religious preference. Sixty-seven percent reported having a current sexual partner.

### Measures

The International Index of Erectile Function (IIEF-5), an abridged version of a longer, 15-item instrument, was administered to assess participants' erectile function.<sup>11,12</sup> The IIEF-5 consists of 5 items that ask about participants' erectile functioning over the past 6 months. Participants responded to items on a 1 to 5 scale ranging from "almost never/never" to "almost always/always". Items were summed to create a total score that could range from 5 to 25. Total scores reflect erectile functioning and satisfaction, with low scores indicating greater dysfunction. This measure has shown high sensitivity (.98) and specificity (.88).<sup>11</sup> Cut scores for the current study were consistent with the literature: mild ED = 17-21; mild-to-moderate ED = 12-16; moderate ED = 8-11; and severe ED = 5-7.<sup>13</sup> Reliability in this sample was  $\alpha = .93$ .

The authors were unable to find a validated measure assessing men's knowledge of ED risk factors in the literature. Therefore, participants' knowledge of ED risk factors was assessed using an online nonvali-

dated questionnaire entitled "Impotence [Erectile Dysfunction] Quiz: Test Your Medical IQ of ED" from [www.emedicinehelp.com](http://www.emedicinehelp.com).<sup>13</sup> Questions assess knowledge of specific risk factors (eg, age, obesity, depression, prostate cancer), symptoms, incidence rate, treatments, normal erectile functioning, and implications of ED. The questionnaire contains 16 items (3 true/false and 13 multiple choice items), and the total score corresponds to the percentage correct. According to the online version, the average score is 11 items correct (69%).<sup>13</sup>

A single item asked participants to identify behavioral changes they had tried to improve their erectile functioning. Options included taking medications at a different time, and/or decreasing tobacco, caffeine, or alcohol consumption. The Erectile Dysfunction Inventory of Treatment Satisfaction – Patient Version (EDITS) is an 11-item questionnaire administered to assess participants' satisfaction with their medical treatment of ED.<sup>14</sup> Items assess treatment satisfaction, ease of use, confidence in ability to perform, partner satisfaction, and naturalness of erections achieved during treatment. These items are rated on a scale ranging from 0 (dissatisfaction) to 4 (high satisfaction) and then summed, with total scores ranging from 0 (extremely dissatisfied) to 100 (extremely satisfied). The measure displayed high internal consistency ( $\alpha = .90$ ) and high test-retest reliability ( $r = .98$ ).<sup>14</sup> Several studies have used cutoff scores of 0 = very dissatisfied; 25 = dissatisfied; 50 = neither satisfied nor dissatisfied; 75 = satisfied; and 100 = very satisfied.<sup>15,16</sup> These cut scores and classifiers were used in the current study; reliability was  $\alpha = .92$ .

The authors further explored

reasons for veteran dissatisfaction with ED treatment by asking participants to respond to a single item: "Why are you dissatisfied with your erectile dysfunction treatment?" They could indicate that they were satisfied or circle all options for dissatisfaction that applied ("I would like to receive more pills per month," "The treatment does not work well," or "I want more information about erectile dysfunction and treatment"), or write in a response. The authors inquired about the number of pills prescribed to ascertain whether dissatisfaction was due to VA-specific policies vs veterans' understanding of ED and effectiveness of treatment, which providers have more ability to improve.

In addition to the quantitative data obtained from the completed surveys, unsolicited responses from participants to the principal investigator via phone calls, and letters regarding treatment satisfaction were gathered. The second author conducted a basic exploratory content analysis of these unsolicited responses to group them into themes related to this study, such as satisfaction or dissatisfaction with ED treatment.

### RESULTS

The authors first assessed levels of ED and satisfaction with treatment in the sample. On average, participants reported mild-to-moderate erectile dysfunction ( $M = 13.1$ ;  $SD = 5.7$ ), which is higher than that of the general population and consistent with samples of men referred for ED treatment.<sup>17,18</sup> Satisfaction levels were slightly above neutral on the EDITS questionnaire ( $M = 58.3\%$ ;  $SD = 24.5$ ). In response to a separate single-item question regarding reasons for dissatisfaction, only 6.4% of veterans reported being satisfied with their ED treatment.

According to respondents, the

primary reasons for dissatisfaction were wanting more medication (46%), finding the treatment ineffective (26.7%), and desiring more information (24%). Further, ED severity was negatively correlated with satisfaction with ED treatment ( $r = .72, P < .01$ ; note that higher scores correspond to less severe ED on this measure). However, despite moderate-to-low levels of satisfaction, 79.2% of patients planned to continue with their ED treatment (59.3% very likely and 19.9% moderately likely).

The authors also assessed participants' communication with PCPs about their sexual functioning. Twenty-five percent reported not talking with their PCP about sexual concerns (despite all having been prescribed an ED medication in the past year). In this sample, talking with one's PCP was not related to increased knowledge of ED risk factors ( $t [294] = .32, ns$ ). Those who talked to their PCP tended to be less satisfied with treatment ( $M = 56.2; SD = 24.5$ ) than those who did not talk to their PCP ( $M = 64.7; SD = 23.3; t (213) = -2.2; P = .03$ ), likely because those who felt their treatment was working for them felt less need to talk to their provider. Indeed, those who talked to their PCP trended to have more severe levels of ED ( $M = 12.7; SD = 5.8$ ) than those who did not ( $M = 14.2; SD = 5.3; t [285] = -1.91; P = .057$ ; note that higher scores correspond to less severe ED on this measure). Finally, adults aged  $> 65$  years were less likely to talk to their PCP than were younger adults (69% vs 81%);  $\chi^2 (1, N = 291) = 5.57; P = .018$ .

Generally, the level of knowledge of ED risk factors was lower than the average of respondents to the original online survey (62% vs 69%).<sup>13</sup> Younger adults were slightly more

knowledgeable ( $M = 64\%; SD = 13$ ) than were older adults ( $M = 60\%; SD = 15$ ),  $t (288.08) = 2.01; P = .046$ .

Finally, most veterans reported few attempted behavioral changes to address ED, such as taking medications at a different time or decreasing use of tobacco, caffeine, or alcohol ( $M = 1.3; SD = 1.1$ ). Thirty percent had not tried any behavioral changes; 34.1% tried 1 change; and 35.9% had tried more than 1 behavioral change. In contrast, 89% of participants reported using a PDE5 medication. Eight-two percent of participants reported currently receiving ED treatment of some kind; within this group, 97.4% reported currently taking a PDE5 medication. Only 2.5% of veterans reported using other kinds of treatment, such as vacuum pump, suppository, over-the-counter medication, injections, and not using a PDE5 medication, whereas 6.7% were using other kinds of treatment as well as a PDE5 medication.

In addition to the quantitative responses, 48 participants wrote unsolicited comments about their experiences with ED treatment on their returned questionnaires. The principal investigator also received 9 telephone calls from intended study participants, who provided verbal feedback regarding their experience with ED treatment. Comments unrelated to the study were eliminated, and the remaining written and verbal responses were grouped into categories to identify themes. Mirroring the quantitative results, participants providing qualitative feedback were dissatisfied with their ED treatment. Specifically, 43% of the comments consisted of complaints regarding the ineffectiveness and/or undesirable adverse effects (AEs) of ED medications and other ED treatments, including physical AEs (eg, headaches), sentiments that treat-

ment does not feel "natural," and dissatisfaction with the quality and length of sexual encounters despite treatment. Yet 24% of the comments entailed requests for more and/or different ED medications. Less frequent, although significant, comments related to decreased sexual interest and performance because of other medical conditions, such as pain, prostate surgery, and hypertension (15%); desire for additional information about ED treatments from health care providers (9%); use of nonpharmacologic ED interventions (eg, vacuum pump, 7%); and concerns about their partners' level of sexual dissatisfaction as a result of their ED (7%).

## DISCUSSION

The present study examined knowledge of ED risk factors and level of satisfaction with ED treatment in a veteran population. Pharmacologic interventions comprised the most prevalent form of ED treatment. Both quantitative and qualitative results indicated areas for improvement in veteran satisfaction with ED treatment. Overall, veterans reported being neither satisfied nor dissatisfied with their current ED treatment, although very few reported being satisfied in response to a single item. The discrepancy may be related to the negative wording of the latter question ("Why are you dissatisfied with your erectile dysfunction treatment?"), which potentially biased participants' responses. Several veterans also provided many unsolicited comments regarding areas for improvement. Despite feeling neutral to dissatisfied with treatment, 80% planned to continue with treatment. Sources of dissatisfaction included restricted access to ED medication (eg, limiting pills to 4 per month), ineffectiveness of treatment (eg, poor quality of erection, lack of climax), physical AEs,

a desire for more information about ED, and psychological and relational concerns (eg, partner sexual dissatisfaction). As one veteran in his 80s lamented in describing the apparent end to his sexual life despite current ED treatment, “Is that all there is? It is the end of the road.”

The authors identified several barriers to implementing potentially beneficial interventions other than ED medications. Specifically, despite receiving long-term treatment for ED, veteran participants showed average knowledge of information related to ED risk factors. Of concern,

***Despite feeling neutral to dissatisfied with treatment, 80% of study patients planned to continue with treatment.***

discussing sexual health concerns with a PCP was not associated with increased knowledge of ED risk factors. This may explain the finding that veterans plan to continue with medication treatment despite feeling only neutral to dissatisfied about their current ED treatment.

Veterans who talked to their PCP about ED were less satisfied with treatment than were those who did not talk to their PCP, likely because those who felt their treatment was working for them felt less need to talk to their provider. Indeed, those who talked to their PCP tended to have more severe ED than those who did not. It may be that veterans avoid discussing ED with their PCP until they reach advanced ED when it is too late for treatment to make a difference. The principal investigator’s receipt of unsolicited telephone calls from intended study participants desiring to discuss ED—something that

has not occurred during the researchers’ involvement in dozens of prior health-related studies—illustrates the importance veterans place on sexual concerns and the need to encourage discussion about the topic in the context of health care appointments. Specifically, older adults would benefit from more conversations with PCPs as they reported less knowledge of ED risk factors and fewer conversations with PCPs about sexual concerns than did younger men.

### Adverse Events

Given the AEs reported by veterans and the significant cost of ED medications within the VA system,<sup>2</sup> increased use of alternative nonpharmacologic and preventive behavioral approaches would be clinically and economically beneficial. For example, in one study, men with ED who engaged in a lifestyle program that focused on weight loss, diet, and exercise were found more likely to experience improvements in erectile functioning compared with men who did not participate.<sup>6</sup> Yet in the current study, 30% of participants had not attempted behavioral changes to address ED.

The VA’s Health Promotion and Disease Prevention (HPDP) Program focuses on preventive services and behavioral interventions to reduce health risks within primary care settings.<sup>19</sup> This program may provide a framework for efforts to prevent and ameliorate ED. Specifically, coaching and education by HPDP experts could reduce PCPs’ discomfort with sexual health discussions and normalize the value of such conversations for both providers and patients. Existing HPDP behavioral interventions targeting areas such as weight loss and smoking cessation also

could emphasize the potential secondary benefit of improved sexual functioning. To that end, preventive health campaigns could include sexual health and ED prevention as topics on patient education materials. Including sexual functioning on telephone or in-person prescreening questionnaires prior to routine appointments with PCPs also may facilitate destigmatization of sex as an important health topic.

### Limitations

Limitations of the current study include its correlational design, which precludes conclusions regarding causal relationships among the variables in question. The authors cannot speculate about how well their sample represents the general veteran population given its low response rate (although comparable to a similar study).<sup>10</sup> In addition, the lack of a validated measure of ED risk-factor knowledge meant reliance on an online questionnaire with unknown psychometric properties. To identify alternatives to pharmacologic treatment for ED, it would be beneficial for future research to examine the reasons for dissatisfaction among veterans, assessing satisfaction changes after implementation of behavioral and/or preventive interventions.

### CONCLUSION

This study deepens the understanding of ED treatment efficacy among veterans in light of the paucity of available information. Overall, veterans are neutral to dissatisfied with their ED treatment, yet plan to continue it in the context of limited alternatives and possible lack of knowledge of behavioral methods shown to improve erectile functioning. Future studies that examine the reasons for continuing medication despite neutral satisfaction would

help explore this finding. Based on these results, the authors recommend increased attention and discussion of sexual health during PCP visits and enhanced efforts toward using behavioral strategies to prevent and reduce ED. Encouragement from PCPs to address sexual health concerns earlier in a veteran's treatment course—and in the context of behavioral and lifestyle change—may assist in preventing veterans' sexual lives from prematurely reaching "the end of the road." ●

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### Disclaimer

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