

Screening for Erectile Dysfunction in Diabetes

Colton Leavitt¹, Elijah Grillo² MD

1. University of Colorado School of Medicine, Colorado Springs Branch

2. United States Air Force Academy 10th Medical Group



Background

- The CDC reports that in 2015, 15.3 million men in the US had diabetes, and nearly 34% of the adult population had pre-diabetes.
- Erectile dysfunction (ED) is highly associated with diabetes and should be considered as a common complication along with nephropathy, neuropathy and retinopathy.
- A recent meta-analysis estimates that overall, 52.5% of men with all types of diabetes are affected by ED¹.
- Age is not a limiting factor as men with diabetes experience ED 10-15 years earlier than men without diabetes² with 37% of men with Type 1 Diabetes aged 18-35 experiencing ED³.
- Multiple recommendations exist for routine ED screening in patients with diabetes, yet it is not a common practice^{1,4}.
- ED is a highly distressing but easily treatable condition with impacts in multiple aspects of patients' lives.

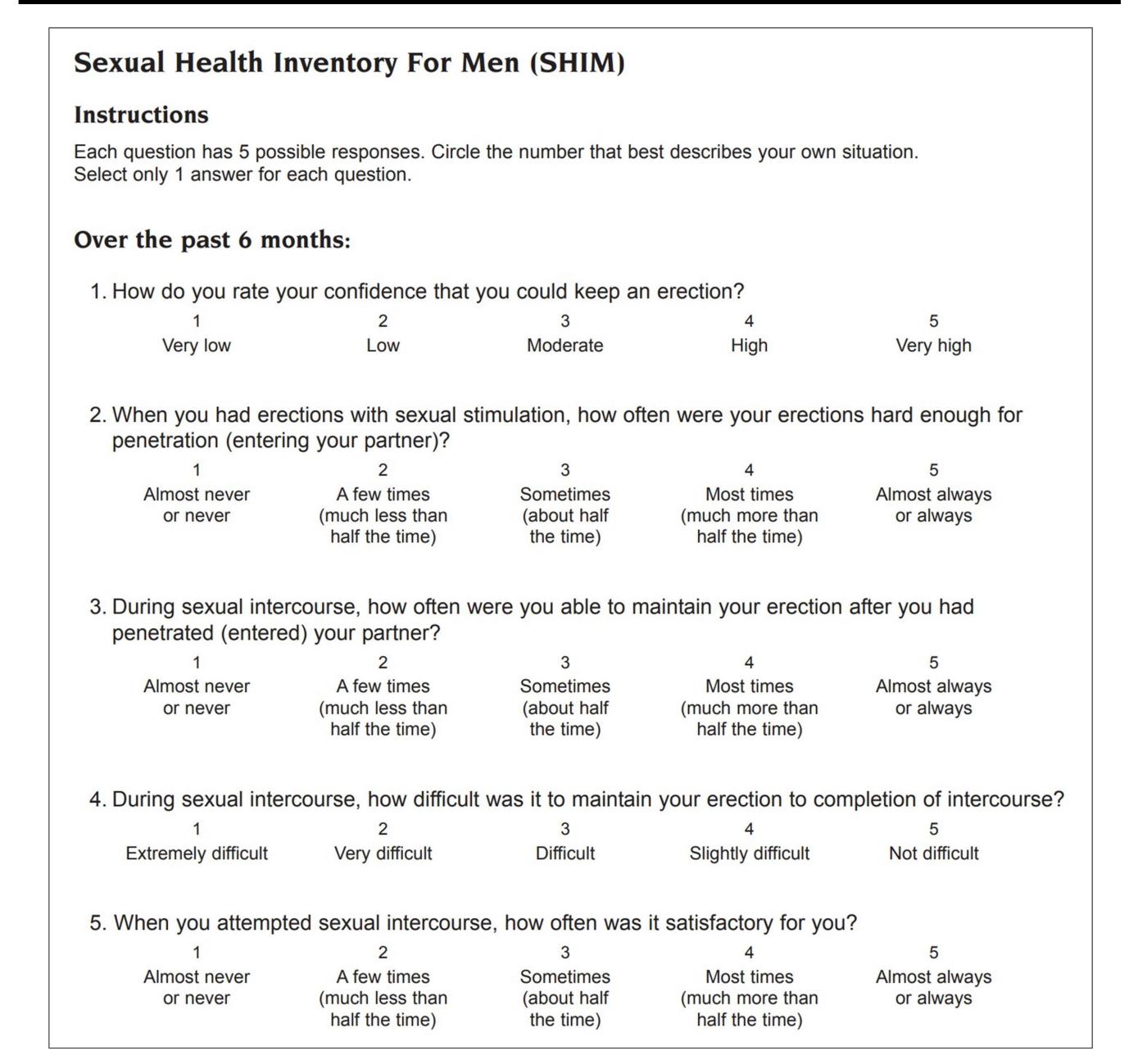
Intervention Objective

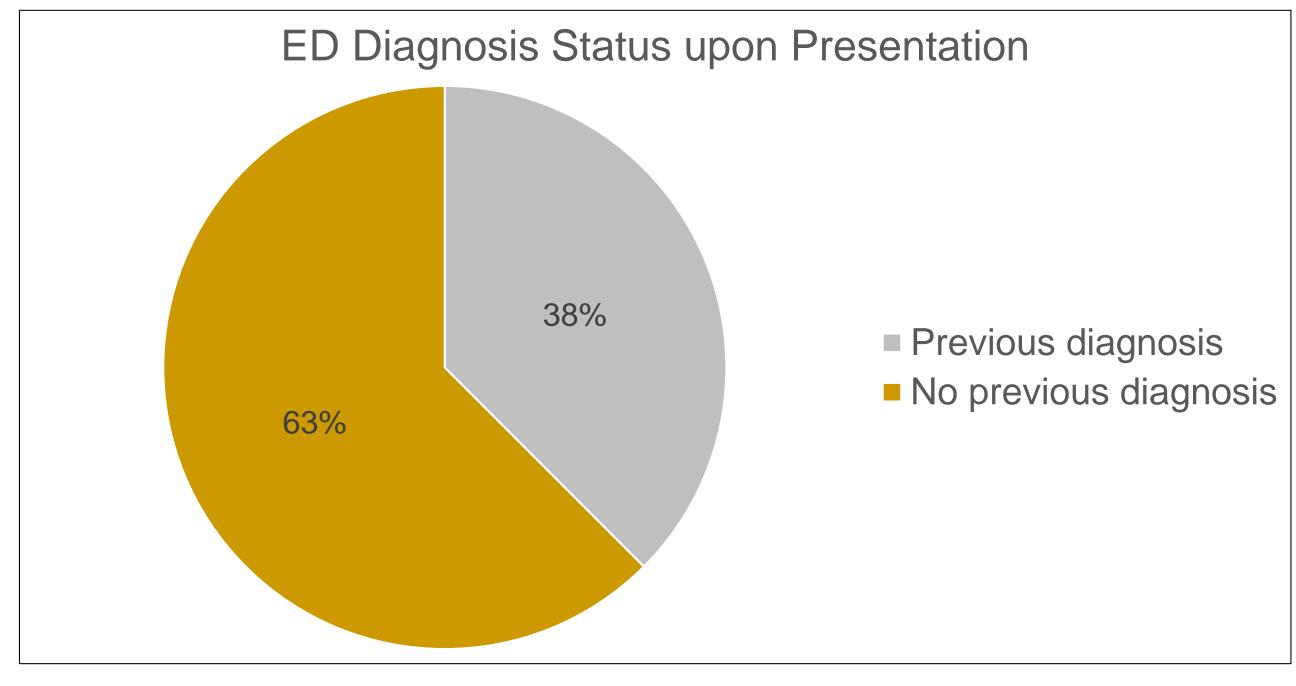
By February 29, 2020, all male patients with diabetes presenting to the USAFA Internal Medicine clinic under the care of Dr. Grillo will be screened for erectile dysfunction using the Sexual Health Inventory for Men (SHIM) (IIEF-5), a validated short 5 question screening questionnaire.

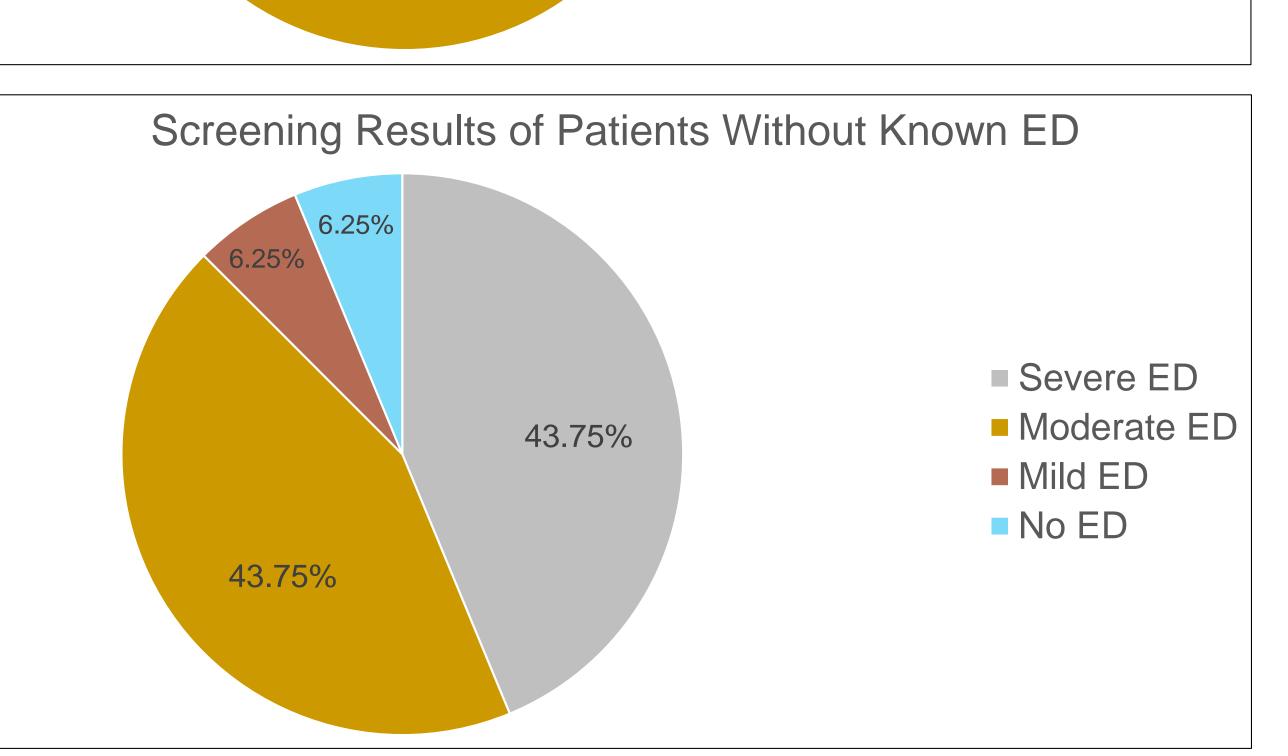
Intervention Description

- Male patients with diabetes were given a SHIM questionnaire at their diabetes follow-up appointment.
- Patients identified to have ED were offered treatment and the results of the screening were noted in the patient's chart.
- After the intervention, the charts of all eligible patients were reviewed to determine the rate and results of screening.

Program Evaluation







Results

- At completion, there were 29 total eligible patients. 57% were screened, 11% deferred to the next appointment, and 32% were unaddressed.
- The average Hemoglobin A1c was 7.95 (standard deviation 2.2)
- 63% of patients did not have a known diagnosis of ED
- Of all patients who were screened without known ED, 93% had some degree of ED (SHIM score <22); 46% of those were severe.
- Of screened patients, 60% agreed to treatment.

Discussion

- An overwhelming majority of diabetes patients likely have undiagnosed ED (88% in our population).
- Patients and providers alike are often uncomfortable broaching the topic of sexual dysfunction, yet sexual dysfunction can impact patients in multiple aspects of their lives⁵.
- Primary care providers should screen for symptoms of erectile dysfunction in all men with any form of diabetes.
- A standardized verbal question or screening form such as the SHIM is a simple way to screen at-risk patients.
- Once the topic is addressed, patients are generally receptive to treatment (60% in our group), and treatment of ED is generally very successful.

Conclusions

 A significant percentage of male patients with diabetes have undiagnosed ED, and the topic is rarely addressed among this population. A simple screening form can be used successfully to initiate the conversation, and when positive, patients are often receptive to treatment.

Reference

Kouidrat Y, Pizzol D, Cosco T, Thompson T, Carnaghi M, Bertoldo A, et al. High prevalence of erectile dysfunction in diabetes: a systematic review and meta-analysis of 145 studies. Diabetic medicine: a journal of the British Diabetic Association. 2017;34(9):1185-92.
 Malavige LS, Levy JC. Erectile dysfunction in diabetes mellitus. The journal of sexual medicine. 2009;6(5):1232-47.
 Afroz A, Zhang W, Wei Loh AJ, Jie Lee DX, Billah B. Macro- and micro-vascular complications and their determinants among people with type 2 diabetes in Bangladesh. Diabetes & metabolic syndrome. 2019;13(5):2939-46.
 Brien JC, Trussell JC. Erectile dysfunction for primary care providers. The Canadian journal of urology. 2008;15 Suppl 1:63-70;

5. Sadovsky, Richard. "Asking the questions and offering solutions: the ongoing dialogue between the primary care physician and the patient with erectile dysfunction." Reviews in urology vol. 5 Suppl 7,Suppl 7 (2003): S35-48.