Erectile Dysfunction in Telemedicine
The Standardized Patient Experience

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Disclosures

- None
Agenda

• Gender Disparities in Health Service Use
• Rise of Telemedicine in Men’s Health
• The Standardized Patient Experience
• Conclusions
Men Use Health Services less than Women

- Well documented phenomenon\textsuperscript{1, 2, 3}

- 2019 Cleveland Clinic MENtion It Survey
  - Of men who forego annual check ups, 61% would be more likely to participate if
    - Visits were conducted virtually (telemedicine)
    - Appointments available outside of work hours
    - They could be screened at events they’re already participating in

- Some men are dishonest or withhold symptoms from their doctors. Why?
  - 46% are uncomfortable talking about sex-related concerns
  - 36% didn’t want to hear that they needed to change their lifestyle
  - 37% knew something was wrong, but weren’t ready to face the diagnosis

Telemedicine and Erectile Dysfunction

20%
30%
40%
50%

These are the real number of men dealing with some kind of ED.

Four causes men to stay quiet. Ignorance about who to talk to, or what to discuss or in that way.

RORMA: 69% of men have the information they need about the problems they have, in the safety, comfort, and privacy of their own home. Or wherever they’re well. Because if you’re going to someone else’s well, good for you.

Also, what’s the password? We gotta check some stuff here.
How to Sign Up

• Questionnaire with:
  • Demographics
  • Billing information
  • Medical history
  • Identity verification
  • Total of 15-20 minutes to complete

• Select type and quantity of pills

• Await provider review
Meet the Young & the Impotent

- Sudden ED with an established partner
  - No longer experiences nocturnal tumescence
  - Can’t sustain an erection while masturbating
  - No past personal or family history of disease
  - Physical exam and vital signs are WNL
  - Does not take any medications

- Sudden ED with a new partner
  - Experiences nocturnal tumescence
  - Able to masturbate with a rigid erection
  - Very anxious, self conscious
  - No past personal or family medical history
  - Physical exam and vital signs are WNL
  - Does not take any medications

- Gradual onset ED with a new partner
  - No longer experiences nocturnal tumescence
  - Able to masturbate with satisfactory erection
  - Leads sedentary lifestyle
  - Paternal history of myocardial infarction
  - Obese & hypertensive (140/90mmHg)
  - Does not take any medications
Medical Questionnaire

1. Problems attaining or maintaining an erection that is rigid enough for sex?
2. How did your ED begin?
3. Erections when masturbating, wake up, or neither?
4. Describe your sex drive
5. Any formal treatments for ED? If so, what drugs and doses? Side effects?

6. Have you had a physical exam?
   If not, please visit a local provider and return with results

7. Have you had your blood pressure measured in the past 6 months?
   If not, please visit a local pharmacy for a quick measurement—then you may resume your visit

8. Do you take any medications, vitamins, or supplements?
9. Do you take any of the following: Nitrate containing medications, alpha blockers, or riociguat (full list omitted)
10. Allergies? Please list each with the corresponding reaction
11. Past medical and surgical history
12. **CV risk factors** (check all that apply) diabetes, high cholesterol, high BP, father having heart attack or heart disease at age 55 or younger, mother having hard attack or heart disease at age 65 or younger
13. **CV symptoms** (check all that apply)
   chest pain or shortness of breath when climbing 2 flights of stairs or walking 4 blocks, chest pain or shortness of breath with sexual activity, unexplained fainting or dizziness, prolonged cramping of the legs with exercise (tell us more), abnormal heart beats or rhythms

14. **Other medical problems** (tell us more about each)
   prostate cancer, enlarged prostate (BPH), kidney transplant or any condition affecting the kidney, liver disease, multiple Sclerosis or similar disease, spinal injuries and/or paralysis, neurological diseases, stomach, intestinal, or bowel ulcers, heart arrhythmias (abnormal beating of the heart), any acquired, congenital, or developmental abnormalities of the heart, heart murmurs

15. **Troubled by any of the following?** (if so tell us more about each)
   Little interest or pleasure in doing things, feeling down, depressed, or hopeless, feeling nervous, anxious, or on edge (enough that it impairs your ability to function at work or at home), worrying too much about different things (enough that it impairs your ability to function at work or at home)

16. **Recreational drug use**: Poppers or rush, amyl nitrate or butyl nitrate, cocaine, cigarettes, marijuana, other

17. **Genital problems** (check all that apply)
   Marked curve or bend in penis that interferes with sex, or Peyronie’s, pain with erections or ejaculation, foreskin that’s too tight, fibrous tissue in the penis (lumps or bumps that feel hard), physical problems (scarring or other issues related to penis).

18. **Any other issues** (check all that apply)
   Riapism (erection lasting longer than 4 hours), retinitis pigmentosa, anterior ischemic optic neuropathy (AION), blood clotting disorder, abnormal bleeding or bruising, or coagulopathy, stomach or intestinal ulcer, prior heart attack, heart failure, or narrowing of the arteries, stroke or severe insufficiency of the autonomic nervous system, peripheral vascular disease, history of QT prolongation in you or your family, sickle cell anemia, myeloma, leukemia, idiopathic hypertrophic subaortic stenosis, use of blood thinners.

19. **Anything else you want to tell us about?**
Results: Sildenafil for All

- Choices of dosages and quantities of pills
- No further work up or referrals
- Not all prescribers were board-certified
- Standardized and comprehensive treatment plans

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose (mg)</th>
<th>Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sildenafil</td>
<td>20</td>
<td>$2</td>
</tr>
<tr>
<td>Viagra (generic)</td>
<td>25, 50, 100</td>
<td>$34</td>
</tr>
<tr>
<td>Viagra (branded)</td>
<td>25, 50, 100</td>
<td>$70</td>
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<tr>
<td>Cialis (generic)</td>
<td>2.5, 5, 10, 20</td>
<td>$11, $44</td>
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<tr>
<td>Cialis (branded)</td>
<td>2.5, 5, 10, 20</td>
<td>$17, $69</td>
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Discussion

- Psychogenic ED
- Battling sales of counterfeit sildenafil and ED supplements
- Should sildenafil be OTC?

Figure 1 Microbial growth analysis of phosphodiesterase-5 inhibitors (PDE-5i) products (29).


Table 2 Analysis of phosphodiesterase-5 inhibitors (PDE-5i) purchased from the Internet

<table>
<thead>
<tr>
<th>Pharmacy</th>
<th>Information sheet provided?</th>
<th>Counterfeit or authentic</th>
<th>Percent active ingredient</th>
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<tbody>
<tr>
<td>Pharmacy 1</td>
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<tr>
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<tr>
<td>Pharmacy 21</td>
<td>No</td>
<td>Counterfeit</td>
<td>30</td>
</tr>
</tbody>
</table>

PDE-5i products purchased from Internet pharmacies rarely contain the stated amount of active ingredient (17).
Conclusions

• Innovative solutions are needed to encourage men to seek care
• Men’s telehealth companies are convenient, affordable, and popular
• Urologists must adapt to modern patient needs and preferences in care delivery to optimize safety
Thank You!