Prevalence And Treatment Pattern Of Erectile Dysfunction Amongst Men In Southwestern Nigeria
O Omisanjo, O Faboya, O Aleetan, A Babatunde, A Taiwo, S Ikuerowo

Citation

Abstract
Introduction: Erectile dysfunction (ED) is estimated to affect 52% of American men between the ages of 40 and 70 years. There are few documented reports describing the prevalence of ED in Nigerian men.

Aim: To estimate the prevalence and treatment pattern of ED in a population of Nigerian men.

Materials and Methods: We administered the Sexual Health Inventory for Men (SHIM) questionnaire to 520 healthy Nigerian men who had accompanied their relatives to different outpatient clinics in our hospital between January and June 2009.

Results: Overall, 494 questionnaires were suitable for analysis. The age distribution was 21 – 30 years (124 men), 31 – 40 years (220 men), 41 – 50 years (98 men), 51 – 60 years (32 men), and 61 – 70 years (20 men). The mean age of the respondents was 36.8 years. Overall, 226 (45.7%) men had some degree of ED. The prevalence of ED was 34.3% in men aged 40 years and below and it was 72% in men above 40 years. Forty (17.7%) of the men with ED had hypertension, diabetes, or both. Only 70 (31.0%) men with ED had discussed their problem with anyone and only 60 (26.5%) men were on treatment for the condition.

Conclusions: There is a high prevalence of ED amongst Nigerian men. The incidence is much higher for men above 40 years compared to men 40 years and below. Few men with ED were on treatment for it.

INTRODUCTION
Erectile dysfunction (ED) is the inability to achieve or maintain penile erection for satisfactory sexual intercourse. It is often a distressing and embarrassing condition not just for the affected men but also for their sexual partners. It is an important cause of marital discord. It is often an age-related condition in which it can be part of andropause. Other important aetiological factors include chronic illnesses like diabetes mellitus, chronic renal failure, cardiovascular disease, concurrence of other genitourinary diseases, psychological disorders, smoking, and use of some medications. Though there are different proposed classifications for ED, the most popular classification is into organic, psychogenic, and mixed types [1]. Traditionally, ED is regarded as a disease of middle-aged men with Feldman et al. in 1994 estimating that 52% of American men between 40 and 70 years of age have ED [2]. Recent reports however suggest that ED is not uncommon amongst young men with Heruti et al. finding an ED prevalence of 22.1% amongst young Israeli men (less than 40 years) [3]. There are very few reports in our environment documenting the prevalence rates of ED and most of them have studied men attending clinics for chronic illnesses [4-6]. More so, little mention has been made about the treatment pattern of ED in our environment. Our study was to assess the prevalence rate of ED and the treatment pattern in otherwise healthy men in southwestern Nigeria.

MATERIALS AND METHODS
This was an observational prospective study. The study was approved by the local hospital ethics committee. We administered the Sexual Health Inventory for Men questionnaire (SHIM) to 520 men who had accompanied their relatives (patients) to our out-patients clinics between January and June 2009. These were men who had not come to the hospital for any consultation themselves. Overall, 494 questionnaires were analyzed after discarding 26 improperly filled SHIM questionnaires. Statistical analysis was done by Statistical Package for Social Sciences (SPSS) for windows version 15.
SHIM questionnaire

SHIM questionnaire is an abridged 5-item version of the 15-item International Index of Erectile Function (IIEF-15) [7]. Otherwise called the IIEF-5, the SHIM is an already validated tool used to detect ED and assess its severity. A respondent is scored one to five points on each of five questions about his erectile function. SHIM score is the sum of the questions. The lowest total score is 5 and the highest total score is 25. Scores of 22 to 25 are classified as Normal Erection. Scores of 21 and below are classified as different degrees of ED: 17-21 – Mild ED; 12-16 – Mild to moderate ED; 8-11 – Moderate ED; 5-7 – Severe ED.

RESULTS

Overall, 494 questionnaires were analyzed. The age distribution was: 21 – 30 years (124 men), 31 – 40 years (220 men), 41 – 50 years (98 men), 51 – 60 years (32 men), and 61 – 70 years (20 men). Mean age of the respondents was 36.8 years. Overall, 262 (45.7%) men had some degree of ED. Prevalence and severity of ED among respondents is presented in table 1. Out of 344 men aged 40 years and below, 118 (34.3%) had ED, compared with 108 (72.0%) out of 150 men aged 40 years or more (p=0.03). Forty (17.7%) men with ED had hypertension, diabetes, or both (table 2). ED was more prevalent in men aged above 40 years than among men aged 40 years and below in all groups.

Only 70 (31.0%) men with ED discussed their problem with anyone. Of this number, only 30 (42.9%) discussed the problem with a medical personnel. Sixty (26.5%) men out of the total number of patients with ED were on medication for the condition. Most of those on treatment (n=36, 60%) were on some herbal or traditional remedy.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Units</th>
<th>Total</th>
<th>Mild</th>
<th>Mild Mild</th>
<th>Mild</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30 years (n=124)</td>
<td>n (%)</td>
<td>62 (33.9%)</td>
<td>12 (25.8%)</td>
<td>10 (8.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>31-40 years (n=220)</td>
<td>n (%)</td>
<td>70 (31.9%)</td>
<td>46 (20.9%)</td>
<td>16 (7.3%)</td>
<td>8 (3.6%)</td>
<td>9 (4.1%)</td>
</tr>
<tr>
<td>41-50 years (n=98)</td>
<td>n (%)</td>
<td>30 (61.2%)</td>
<td>12 (24.5%)</td>
<td>4 (4.1%)</td>
<td>4 (4.1%)</td>
<td>2 (6.3%)</td>
</tr>
<tr>
<td>51-60 years (n=32)</td>
<td>n (%)</td>
<td>20 (62.5%)</td>
<td>12 (37.5%)</td>
<td>10 (31.3%)</td>
<td>4 (12.5%)</td>
<td>2 (6.2%)</td>
</tr>
<tr>
<td>61-70 years (n=20)</td>
<td>n (%)</td>
<td>20 (100.0%)</td>
<td>8 (40.0%)</td>
<td>8 (40.0%)</td>
<td>2 (10.0%)</td>
<td>2 (10.0%)</td>
</tr>
</tbody>
</table>

Table 2

Frequency of co-morbidity amongst respondents with erectile dysfunction (n=40)

<table>
<thead>
<tr>
<th>Groups</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension &gt;40 years</td>
<td>18 (8.0%)</td>
</tr>
<tr>
<td>Hypertension &lt;40 years</td>
<td>2 (0.9%)</td>
</tr>
<tr>
<td>Diabetes &gt;40 years</td>
<td>7 (3.1%)</td>
</tr>
<tr>
<td>Diabetes &lt;40 years</td>
<td>1 (0.4%)</td>
</tr>
<tr>
<td>Hypertension &amp; Diabetes &gt;40 years</td>
<td>12 (5.3%)</td>
</tr>
<tr>
<td>Hypertension &amp; Diabetes &lt;40 years</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

DISCUSSION

ED remains a very distressing condition not only for the male sufferers but also for their sexual partners and often causes a lot of tension in relationships. An acknowledgement of the problem and a frank discussion of the full ramification are often vital to seeking professional help. Whilst discussions surrounding sexual intercourse and related problems are common place in the developed world, there is usually a lot of secrecy surrounding sexually related problems in our environment. Issues bothering on sex are often not just discussed. It is assumed that ED is uncommon in our environment [8]. Few reports exist in our environment to document the scope of the problem. These reports have documented prevalence rates ranging from 43.8% to 83% [4, 6, 9-11].

Almost half of our respondents have had some degree of ED. The prevalence rate in our study is consistent with the earlier mentioned studies. The incidence per age distribution is lowest for the 21-30 years group (33.9%) and highest for the 61-70 years group (100%). This is in keeping with the expected rise in incidence of ED with age. It is however disturbing that even much younger respondents (<30 years) still have had a relatively high prevalence of ED (33.9%). Okulate et al. have documented a similar figure (36%) in the same young age group in the past [12]. Since our study does not detect any significant rate of co-morbidity in this young age group, we can only speculate that the ED in this group may be psychogenic as a good number of the much younger respondents may not be in stable relationships.
The incidence of ED amongst men above 40 years (72%) is at least twice that of men aged 40 years and below (34.3%). Both groups of men however have had mainly mild to moderate degrees of ED. Curiously, there is no statistically significant difference in the prevalence of severe ED in men aged 40 years and below on one hand (5.1%) and those above 40 years on the other (7.4%) in our study (p=0.25). This is unlike what earlier studies have shown [11].

The most common chronic illnesses identified have been hypertension and diabetics as previously reported [5]. We did not screen for other chronic conditions like hyperlipidemias, cardiac diseases, and smoking. The absence of a known chronic illness or use of regular medication for such in most of the patients (82.3%) will suggest that the ED is probably age-related in most of the respondents. It is possible some other co-morbidities in the respondents may have been missed. It is therefore important to stress the need for further evaluation of those without any known illness as ED can be a sentinel for cardiovascular diseases [13].

Discussion of the problem still remains generally low with less than a third of those assessed to have ED having discussed it with anyone. Compared to a figure of 26% in a study by Modebe in 1990 [8], it will suggest that nothing has changed much in our environment in two decades with respect to discussion of sexually related topics amongst respondents. However, close to half of those who have had discussed with someone (42.9%), actually discussed with a medical personnel. That is quite encouraging for our own environment considering various cultural inhibitions people exhibit toward discussing sexually related topics with unfamiliar people.

Most of the respondents with ED (73.5%) do not take any form of treatment for the condition. While limited access to medical care might be the main reason for this, it might as well be that some of the respondents are just not bothered by the milder forms of ED. Resort to herbal medication is however a prominent practice amongst the patients who have sought treatment with 60% of them being on herbal medications. While this may be consistent with previously documented preference of our people for herbal treatment [14-16], it is also disturbing considering that drugs like Viagra have been shown to be effective [17] and can even be procured across the counter in Nigeria given our poor legislation and regulation of the purchase of prescription medications. Failure of the respondents to seek orthodox medical treatment may just be yet another sad commentary on the lack of trust of the populace in our health care delivery system.

CONCLUSIONS

ED is common amongst southwestern Nigerian males. The level of discussion of ED remains poor. Though most men with ED do not seek any form of treatment, those who do, mostly resort to herbal remedies.

References

Author Information

**OA Omisanjo**  
Department of Surgery, Lagos State University Teaching Hospital (LASUTH) Ikeja  
Lagos, Nigeria  
sanjofunmi@yahoo.com

**OM Faboya**  
Department of Surgery, Lagos State University Teaching Hospital (LASUTH) Ikeja  
Lagos, Nigeria

**OB Aleetan**  
Department of Obstetrics and Gynaecology, Lagos State University Teaching Hospital (LASUTH) Ikeja  
Lagos, Nigeria

**AO Babatunde**  
Department of Obstetrics and Gynaecology, Lagos State University Teaching Hospital (LASUTH) Ikeja  
Lagos, Nigeria

**AA Taiwo**  
General Outpatient Department, Lagos State University Teaching Hospital (LASUTH) Ikeja  
Lagos, Nigeria

**SO Ikuerowo**  
Department of Surgery, Lagos State University Teaching Hospital (LASUTH) Ikeja  
Lagos, Nigeria