Management of erectile dysfunction: perceptions and practices of Nigerian primary care clinicians

Ariba AJ, MBBS, FMCGP, FWACP(Fam.Med)

Department of Family Medicine, Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria *Oladapo OT,* MBBS, MPH, FWACS, Cert. Reprod. Hlth. Res.

Department of Obstetrics & Gynaecology Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria *Iyaniwura CA*, MBChB, MSc, FMCPH

Department of Community Medicine and Primary Care, Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State,

Nigeria

Dada OA, PhD, FACB

Centre for Research in Reproductive Health, Sagamu, Ogun State, Nigeria

Correspondence to: Dr Ariba A Joseph, e-mail: aribaaj@yahoo.com

Abstract

Background

Erectile dysfunction (ED) is a prevalent health problem in many societies, but the diagnosis is seldom documented in primary care. The objective of this study was to investigate the perception and practices of clinicians regarding the management of ED in primary care settings in Nigeria.

Methods

A self-administered semi-structured questionnaire was applied to a purposive sample of clinicians attending conferences/ workshops organised by the Society of Family Physicians of Nigeria and Update Courses of the Faculties of Family Medicine of the National Postgraduate Medical College of Nigeria and the West African College of Physicians. Information was obtained on their professional characteristics, experiences with the management of ED and possible barriers to the effective management of ED.

Results

A total of 187 completed questionnaires were analysed. Most (87.2%) of the respondents were general practitioners, while the rest were specialists in various fields (excluding sexual health) who worked at the primary care level. One hundred and forty-seven respondents (76%) reported that ED was common in their clinical practice. Over half (56.2%) of the respondents ascribed a high priority to ED management in their day-to-day clinical practice, while 33.2% and 10.6% of them ascribed medium and low priority to ED management respectively. Although 80.8% of the respondents agreed that ED patients could benefit from orthodox treatments, only 18% of them had ever prescribed any medication for affected patients; most (82%) of them either counselled or referred ED patients to secondary or tertiary care level for further management. Most of the clinicians (62%) would not take a sexual history unless the patient brought it up. The reported barriers to the management of ED include lack of a standardised protocol (64.2%), inadequate experience in ED management (85.6%), preference of patients for native medication (42.3%), and the high cost of modern medication (48.1%).

Conclusion

The clinicians acknowledged the high prevalence of ED in the primary care setting and recognised that they had a role to play in managing affected patients. The identified barriers to the management of the condition point to the need for education of both clinicians and patients, as well as the provision of guidelines for the management of ED in primary care settings.

SA Fam Pract 2007;49(9):16

The full version of this article is available at: www.safpj.co.za

P This article has been peer reviewed

Introduction

Sexual health and functions are important determinants of quality of life.1 Recent events relating to male sexual function have provided clinicians with more compelling reasons to pay closer attention to male sexual problems. Over the last few years, advances in the knowledge of male erectile function and its pathology $^{\!\!\!2,3,4}$ have led to an expansion in the treatment options available to clinicians for the management of erectile dysfunction (ED).⁵ In Nigerian society, discussion of sexual matters outside the privacy of the bedroom is generally regarded as a taboo. As a result, information on male sexual disorders is obtained mainly from the public non-medical literature, particularly newspapers and magazines, which are full of attractive but often misleading information on male sexual problems and their solutions.6,7 Although such media reports may have detrimental consequences on the general population, they have succeeded in increasing public awareness about male sexual problems and have generated more interest among men and their sexual partners regarding the condition.

In Nigeria, data on the issue of erectile dysfunction is generally scarce in the scientific literature and studies on clinicians' roles in the diagnosis and management of ED are extremely limited.8,9 Though many prevalence studies have reported that ED is common in most communities, there is evidence that it is often under-diagnosed in primary care settings.^{10,11,12,13,14} Clinicians at the primary care level certainly have an important role to play in the management of ED, since this setting allows early identification of affected individuals and prompt treatment or referral to specialist care. Since the majority of the Nigerian populace receive their health services at the primary care level, it is imperative to explore the role of the clinicians in this setting in the diagnosis and management of the disorder. We therefore conducted a survey among a purposive sample of Nigerian primary care clinicians to assess their perception and practices regarding the management of ED.

Subjects and methods

A survey was conducted among a purposive sample of members of the Society of Family Physicians of Nigeria (SOFPON) who attended regional conferences/seminars held at Ibadan,

Port-Harcourt and Jos, Nigeria, and clinicians who attended workshops/ seminars organised by the Faculties of General Medical Practice of the National Postgraduate Medical College of Nigeria and the West African College of Physicians between November 2005 and May 2006. Topics at the meetings did not include sexual disorders. The Society of Family Physicians of Nigeria is the professional body of Nigerian family physicians and aims to improve family health care among the Nigerian populace. SOFPON is the umbrella body of all family physicians practicing in Nigeria, regardless of the country or college where Fellowship was obtained. Primary care clinicians without a Fellowship may register as associate members of the Society. The committees of this body are responsible for the development of guidelines for the family health services in the country. The mission of SOFPON is to promote the health and wellbeing of the Nigerian citizen at the primary care level and to improve the practice of family health in the country.

Participants at these conferences/ workshops/seminars who agreed to take part in the survey were interviewed using a pre-tested, semi-structured and self-administered questionnaire after the purpose, general content and confidentiality of the investigation had been explained to them.

Precautions were taken to avoid duplication of respondents in the survey. Respondents were informed about the time(s) and place(s) where the questionnaires had been applied previously, and requested to decline filling them in if they had participated in the exercise before.

The questionnaire was divided into three sections: physician's personal characteristics, experience with the management of ED and barriers to effective ED management in primary care. To be included in the study, the participant had to be a clinician currently in practice and providing care for adult males in a primary care setting. Those excluded were urologists, doctors with special training in male sexual problems and those not routinely caring for adult males.

The questionnaire was designed to obtain information on the professional characteristics of the participants, their experience with the management of sexual problems, particularly ED, and their views on the prevalence of and priority ascribed to ED in their clinical practice. Other information sought included their opinions on the contribution of selected risk factors to the development of ED, as well as how such patients were being managed. The participants were also asked to mention the barriers encountered in managing patients with ED at the primary care level.

Data analysis was performed using the Statistical Programme for Social Sciences (SPSS) Windows version 10.0. Internal validity of the analysed data was confirmed by cross-tabulating some independent and dependent variables. Results were presented in frequencies, percentages and descriptive measures.

Ethical clearance for the study was obtained from the Research Ethics Committee of the Olabisi Onabanjo University Teaching Hospital, Sagamu.

Results

A total of 187 correctly completed questionnaires were analysed. One hundred and thirty-six (72.7%) of these were completed by male clinicians and 51 (27.3%) by female clinicians. Most of the respondents (163; 87.2%) were working in general practice settings, while 24 (12.8%) were working in specialist centres. Table I shows the distribution of the clinicians by sex, age and number of years in practice. Most (77.5%) were below the age of 45. Over one-third of the respondents (37.4%) had been in practice for five years or less, while only

 Table I: Distribution of clinicians by sex, age and number of years in practice

N	
	%
44	23.5
46	24.6
30	16.0
25	13.4
19	10.2
14	7.5
9	4.8
136	72.7
51	27.3
70	37.4
36	19.3
29	15.5
19	10.2
10	5.4
18	9.6
187	100.0
	46 30 25 19 14 9

Table II: Clinicians' views on some aspects ofED in primary care

ED III primary care					
Priority ascribed to sexual dis- order	No	%			
High priority	105	56.2			
Medium priority	62	33.2			
Low priority	20	10.6			
How common is erectile dysfunction					
Extremely com- mon	6	3.2			
Fairly common	71	38.0			
Common	76	40.6			
Not common	33	17.7			
Rare	1	0.5			
Opinion on role of psychological problems in causation					
Agree	142	76.0			
Disagree	30	16.0			
Not sure	15	8.0			
Organic disease underlies most ED					
Agree	76	40.6			
Disagree	72	38.5			
Not Sure	39	20.9			
Available drug helpful to only very few patients with ED					
Agree	107	57.2			
Disagree	46	24.6			
Not Sure	34	18.2			
Total	187	100.0			

2.6% of them had practiced for over 30 years. The majority of the clinicians (144; 77.0%) worked in government establishments, while 43, (23.0%) were privately employed. One hundred and nineteen (63.6%) respondents had only a basic medical degree, 52 (27.8%) had a postgraduate fellowship, and the remaining 16 (8.6%) had a postgraduate diploma.

As shown in Table II, most of the clinicians (142; 76.0%) reported that psychological problems underlie most cases of ED, while 76 (40.6%) reported that organic diseases underlie most cases of ED. On the role of drugs in ED management, the majority (80.8%) of the clinicians believed that modern drugs could be of benefit to patients with ED.

The clinicians' practices regarding the management of ED in primary care are shown in Table III.

In response to the question on how likely it was that a clinician in primary care would take a sexual history during the clinical interview without the patient bringing up the topic first, 87 (46.5%) cli-

management of ED in primary care				
Handling of patient with ED	No.	%		
Refer to specialist	47	26.1		
Treat with testosterone- based injection	6	3.2		
Counsel and encourage patient	96	51.3		
Prescribe Sildenafil	28	15.0		
Do not treat	10	5.5		
Treatment usually given to patient with suspected ED				
Refer to specialist	47	25.1		
Give testosterone based injection	6	3.2		
Counsel and encourage patient	96	51.3		
Prescribe Sildenafil	28	14.9		
No treatment	10	5.5		
Taking a sexual history during the clinical interview				
Likely	71	38.0		
Unlikely	87	46.5		
Not Sure	29	15.5		
Total	187	100.0		

nicians said it was unlikely, 71 (38.0%) said it was likely, while 29 (15.5%) were not sure if they would take a sexual history in such a situation.

Table IV shows a list of barriers that clinicians encountered when attempting to manage ED in primary care. The three leading barriers were lack of experience in ED management (85.6%), reluctance of patients to volunteer information on their sexual history (80.2%), and unavailability of standardised management protocol (64.2%).

Discussion

This study focused on clinicians in the primary care setting because of the important role they play in the system of healthcare delivery in Nigeria. Most of these clinicians were general practitioners from different parts of Nigeria, relatively young both in age and in number of years in practice, and would most likely remain in clinical practice for many years to come.

The survey suggested that the majority of the clinicians in the primary care setting in Nigeria perceived ED to be a common problem, although only about half of them ascribed a high priority to its management and only a few had ever prescribed any medication for affected patients. The high prevalence of ED among male patients as perceived
 Table IV:
 Barriers
 encountered
 by
 primary

 care
 clinicians
 managing
 ED

Perceived difficulty	No	%	
ED patients want imme- diate response hence they do not return for follow-up	85	45.5	
Many patients prefer native medication to modern drugs	79	42.3	
The available drugs are too expensive	90	48.1	
There is no standard- ized management available	120	64.2	
There is fear that the drug may cure cardiac arrhythmias	80	42.0	
Inadequate facilities for investigating ED patients	75	40.1	
Patients are often reluctant to volunteer information on their sexual history	150	80.2	
Lack of experience in ED management	160	85.6	
Failure of drugs to help patient may prove more devastating	85	45.5	

Note that multiple responses were allowed

by the clinicians (76%) in this study is in keeping with the observations of previous studies.11,12,13 A cross-sectional study found that 22% of men visiting GPs in London had sexual difficulties.¹⁵ Fatusi et al. reported an overall prevalence rate of 43.8% among men living in some communities in Ile-Ife, Nigeria.8 Similarly, a comparative prevalence study of ED in three countries found the age-adjusted prevalence rates among patients attending primary care clinics to be 57.4% in Nigeria, 63.6% in Egypt and 80.8% in Pakistan.¹⁶ Indeed, it has been estimated that globally, about 150 million men have some degree of ED, and it has been predicted that the worldwide incidence is likely to increase astronomically in the next few decades.¹⁷ Primary care clinicians certainly have a major role to play in the management of this rapidly evolving public health problem.

Contrary to a similar previous study,¹⁸ which found that fewer than 20% of general practitioners ascribed a high priority to sexual problems, over half of the respondents (56.2%) in our study ascribed a high priority to ED management in men presenting to their practices. This may be due to the fact that our study subjects were focusing mainly on erectile dysfunction, while the previous study considered all sexual problems.

Many more of the clinicians (76%) were of the opinion that psychological problems underlie most cases of ED compared to those who ascribed ED to organic problems (40.6%). This impression needs to be corrected through an appropriate educational forum, as this view has changed in the light of new research findings. Although it used to be assumed that most cases of ED were due to psychological problems or part of the normal aging process, recent work on risk factors for ED has shown that, although aging has a strong influence on its occurrence, men with some co-morbid medical conditions are particularly at risk.^{19,20} These conditions include hypertension, diabetes mellitus and dyslipidaemia. Other risk factors implicated include depression, cigarette smoking, caffeine consumption, inactivity and obesity.21 Primary care physicians need to be aware that ED is increasingly being regarded as a multisystemic disorder most frequently caused by vascular insufficiency. It is being postulated that the presence of ED may signal the concomitant presence of a variety of disorders that have similar aetiologies, including psychosocial problems, endocrine imbalances, neurological disorders and cardiovascular risk factors and/or disease.22 It implies that individuals with ED should be further evaluated for other morbidities, as early detection may allow attenuation of disease risk or actual disease. Conversely, the presence of any of these comorbidities should alert a clinician to the possibility of existing ED. Such alertness is extremely important in primary care, where the patients are likely to present when the co-morbidities may be at their earliest stages.

While the majority of the clinicians expressed the belief that modern medications could be of benefit to patients with ED, less than a fifth (18.2%) actually prescribed any form of medication to the patient. The rest (81.8%) either just counselled the patients or referred them to tertiary health centres in the hope that some specialists would attend to them. This practice is probably a reflection of the clinicians' inexperience with the management of the condition or of poor knowledge of the appropriate treatment methods. It brings to the fore the helplessness that the majority of patients with ED face in primary care. The dearth of sexual health specialists in Nigeria further compounds the dilemma for affected individuals. Only a few tertiary centres in the country have urologists, and those available may not actually possess the necessary facilities to investigate and treat ED patients beyond what can be done at the primary care level. There is, therefore, an urgent need to educate primary care physicians on the current management of ED in view of the possibility of referred patients not receiving the expected care or being lost to follow-up. It is also desirable to develop a treatment guideline for managing ED in primary care in the country. Such a guideline should include a simple algorithm for clinicians to follow. Similar guidelines exist in better-organised health systems.23,24

A significant proportion of the respondents (46.5%) were of the view that they were unlikely to take a sexual history during clinical encounters unless their patients brought it up. Previous studies have noted that doctors and patients frequently avoid discussions about sexual problems during interviews.25,26 The doctors perceived sexually-related issues as highly problematic because of their sensitivity and complexity and constrains of time and expertise,25 while patients were concerned about the interpersonal discomfort, embarrassment or shame that accompany the disclosure of sexual information during the clinical interview.26 The situation points to a need for education of both clinicians and patients on the issue of sexual health and its management in primary care. The clinicians need to acquire the appropriate interviewing skills that would elicit the necessary information from their clients.²⁷ A helpful starting point may be for the doctors to routinely include sexual health history into the systemic review of their patients, especially those at higher risk of ED, such as diabetics and hypertensives.

Many of the barriers to the effective management of ED, as noted by the clinicians in this study, have been highlighted in earlier studies.^{18,28} While investigating the role of general practitioners (GP) in the management of problems of sexual dysfunction, Humphrey and Nazareth reported that the physicians highlighted barriers to the management of sexual dysfunction that could be broadly classified into four categories.¹⁸ These include barriers inherent in the doctor, such as a lack of training or knowledge about the topic, and barriers in the doctor-patient interaction, which is influenced by differences in gender, culture and the age of the doctor and the patient. Others were barriers on the part of the patient, such as reluctance or embarrassment about the matter, and contextual/structural barriers, such as inadequate time for consultation, stigma or society's attitudes to sex, as well as the cost of treatment. The main differences in the barriers mentioned by clinicians in this study and those in the previous study can be explained by the fact that, while the current study focused on ED, the previous study considered barriers to managing sexual dysfunctions in both men and women. However, the cultural differences of the doctors and patients in the two study settings may also have influenced their perceptions of the likely barriers.

Conclusion

The clinicians in this study perceived erectile dysfunction to be highly prevalent in primary care settings and recognise that they have a role to play in managing the affected patients. Indeed, they are making efforts to render care to such patients. However, barriers inherent in the physician, the patient, the physicianpatient interaction and the environment where they practice limit the success of their efforts. The identified barriers to the management of the condition point to the need for education of both clinicians and patients, as well as the provision of guidelines for the management of ED in primary care settings.

Acknowledgements

The authors are grateful to the clinicians who participated in this survey. The role played by Mrs OJ Iluromi-Awosile of the Department of Community Health & Primary Care, OOUTH in the initial collation of the results of this study is gratefully acknowledged.

References

- Brosman SA. Erectile dysfunction. Available: www.emedicine.com/med/ topic3023.htm Updated 22/05/2006. (Accessed 24/10/2006).
- Anderson KE, Wagner G. Physiology of erectile function. Physiol Rev 1995;75: 191–236.
- Anderson KE. Pharmacology of penile erection. Pharmacol Rev 2001;53:417– 50.
- 4 Anderson KE. Erectile dysfunction and pathophysiologic pathways involved in erectile dysfunction. J Urol 2003;170:86–314.
- Caresser U, Gleiter CH. Erectile dysfunction: comparison of efficacy and side effects of the PDE-5 inhibitors sildenafil, vardenafil and tadalafil – review of the literature. Eur J Med Res 2002;7(10):435–46.
- 6. Sanni H. Solve your sexual and other relat-

ed problems today. The News Magazine (Nigeria) 2005 Aug 25; p. 6

- 7. Ashiru. Are you a man? The News Magazine (Nigeria) 2005 Jul 24; p. 9.
- Fatusi AO, Ijaduola KT, Ojofehintimi EO, et al. Assessment of andropause awareness and erectile dysfunction among married men in Ile-Ife, Nigeria. Aging Male 2003;6(2):79–85.
- Oke DA, Mbakwe M. Erectile dysfunction in 101 consecutive hypertensive patients and 86 normotensive controls. Nig Med Pract 2004;45:98–101.
- Johannes CB, Araujo AB, Feldman HA, Derby, CA.. Incidence of erectile dysfunction in men ages 40 – 69. Longitudinal results from the Massachusetts Male Aging Study. J Urol 2000;163:460–3.
- 11. Simon JS, Carey MP. Prevalence of sexual dysfunction; results from a decade of research. Arch Sex Behaviour 2001;30(2):177–219.
- Chew KK, Earle CM, Stuckey BGA, Jamrozik K, Keogh EJ. Erectile dysfunction in general medicine practice: prevalence and clinical correlates. Int J Impot Res 2000;12:41–5.
- Pinnock CB, Stapleton AMF, Marshall VR. Erectile dysfunction in the community: a prevalence study. MJA 1999;171: 353–7.
- 14. Adegunloye OA. Sexual dysfunction: intervention issues. Specialist Doctor 2005;12(10):15.
- Nazareth I, Boyton P, King M. Problems with sexual function in people attending London general practitioners: cross sectional study. BMJ 2003;327:423-doi:-10. 1136/bmj.327.7412.423 (Published 23 August 2003). (Accessed 16/09/2006).
- 16.Shaeer KZ, Osegbe DN, Siddiqui ŚH, Razzague A, Glazzer D B, Jaguste V. Prevalence of erectile dysfunction and its correlates among men attending primary care clinics in three countries: Pakistan, Egypt and Nigeria. Int J Impot Res 2003;15(1):14–58.
- 17. Ayta IA, McKinlay JB, Krune RJ. The likely worldwide increase in erectile dysfunction between 1995 and 2025 and some possible policy consequences. BJU Int 1999;84:50–6.
- Humphrey S, Nazareth I. GP's views on their management of sexual dysfunction. Fam Pract 2001;18:516–8.
- 19. Sftel AD, Sun P, Sivunle R. The prevalence of hypertension, hyperlipidaema, diabetes mellitus and depression in men with erectile dysfunction. J Urol 2004;171(6):2341–5.
- 20.Giuliano FA, Leriche A, Jaudinot EO, De Gendre AS. Prevalence of erectile dysfunction among 7689 patients with diabetes or hypertension, or both. Urology 2004;64(6):1196–201.
- Chew KK, Earle CM, Stuckey BGA, Jamrozi KK, Keogh EJ. Erectile dysfunction in general medical practice: prevalence and clinical correlates. Int J Impot Res 2000;12:41–5.
- 22.Sadvosky R. Erectile dysfunction as a signal of risk for significant medical co-morbidities: a primary care review. Sexual Health Reports 2004;1:129–36.
- 23.Ralph D, McNicholas T. UK management guidelines for erectile dysfunction. BMJ 2000;321:499–503.

- 24.AACE Male Sexual Dysfunction Task Force. American Association of Clinical Endocrinologists Medical Guidelines for the evaluation and treatment of male sexual dysfunction: a couple's problem – 2003 update. Endocrine Pract 2003;9(1): 77.
- 25.Gott M, Galena E, Hinchliff S, Elford H. "Opening a can of worms": GP and practice nurse barriers to talking about sexual health in primary care. Fam Pract 2004;21(5):528–36.
- 26.Sankar P, Jones NL. To tell or not to tell: primary care patients' disclosure deliberations. Arch Intern Med 2005;165: 2378–83.
- 27.Tomlinson JM. ABC of sexual health: taking a sexual history. BMJ 1998;317(5): 1573–5.
- 28.Gott M, Hinchliff S. Barriers to seeking treatment for sexual problems in primary care: a qualitative study with older people. Fam Pract 2003;20(6):690–5.