Nigerian Medical Journal
Vol. 52 Issue 2
April - June 2011

ORIGINAL ARTICLE

Health Seeking Behavior of Physicians at the Jos University Teaching Hospital

[1]Agaba P A, [2]Ocheke A N, [3]Akanbi M O, [3]Daniyam C A, [3]Ugoya S O, [3]Okeke E N, [3]Agaba E I.

ABSTRACT

Background: Physicians who have the task of caring for the sick also need to be cared for when they take ill. Health-seeking habits of physicians have been found to be poor in most developed countries. Utilization of health services by physicians in developing countries is not known. We sought to describe the health seeking habits of physicians in Nigeria. **Materials and Methods**: A cross-sectional survey was carried out among physicians at the Jos University Teaching Hospital, a tertiary referral health facility in North-central Nigeria. A pre-tested questionnaire was administered to physicians to get information on their self-reported health seeking habits. **Results**: Self prescription was practiced by 98.6% of the physicians, with antimalarials being the most prescribed drugs (62.5%). Only 46.9% consulted another physician when they take ill, although 78.2% felt they needed a family physician. Many (23.8%) of respondents treated their family members when last sick. The major factors considered by the respondents in choosing the physician they consulted were the specialty of the physician consulted (42.2%); the physician being in the same unit with them (38.5%), and friendship (15.6%). Four (3.7%) of the respondents would not consider any particular factor for choosing a physician if they have to. **Conclusion**: This study showed that a large proportion of physicians self-medicate and a few have family physicians. Guidelines need to be instituted to regulate self-prescribing among physicians in Nigeria. The role of family physicians in primary care needs to be emphasized.

KEY WORDS: Family physicians, Health seeking behaviour, Self prescribing,

INTRODUCTION

Physicians are saddled with the task of caring for sick people. They are at an increased risk of some communicable diseases by virtue of their occupation. They are also predisposed to non-communicable diseases as they tend to live sedentary lifestyles. As humans, therefore, they are not immune to taking ill with the various illnesses they treat in their daily routine. Despite these, physicians are often not willing to admit when they are sick, "working through illnesses". Sometimes, it is as a result of their very busy schedules; other times, it has to do with concerns of confidentiality. They often resort to self prescribing, a habit which in most cases starts early in their career [1,2].

1: AIDS Prevention Initiative Nigeria Plus, Jos University Teaching Hospital, Jos, Nigeria; 2: Department of Obstetrics and Gynecology, University of Jos, Nigeria and 3: Department of Medicine, University of Jos, Nigeria

Correspondence: Dr. Emmanuel I. Agaba Department of Medicine Jos University Teaching Hospital P.M.B 2076 Jos, Nigeria E-mail: eiagaba@yahoo.com, eiagaba@mail.unijos.edu Fax: 234-73-455083 Tel: +234-803-700-1392

While self-prescribing may be valuable in emergency situations, it has the attendant disadvantages of drug abuse and dependence especially when sedatives and pain killers are used[3]. Objectivity is often lost while treating oneself, leading to mis/late diagnosis. Hence, guidelines exist regarding physician self prescribing and caring for their immediate family members [4, 5]. Notwithstanding these, physicians world-wide do not formally utilize health services and thus self medicate when they take ill. Between 52% and 99% of physicians in the western world had reported taking self-prescribed medications [3,6-9].

Nigeria, with over 36 medical schools, produces thousands of physicians every year. However, little is known about the health seeking behavior of physicians in Nigeria. In this cross sectional survey we sought to find out what physicians in Jos University Teaching do when they take ill. Materials and methods

This was a cross sectional survey of randomly selected physicians practicing at the Jos University Teaching Hospital, a 520 bed tertiary health center in north central Nigeria.

Self administered questionnaires were distributed randomly to consenting physicians in the hospital after a pilot study was conducted in the Department of Internal Medicine. The questionnaire used was a tool previously used by Chen and colleagues [6]. This tool was modified based on the result of the pilot study by including antimalarials in the list of medications. Other information sought included demographic data, clinical experience as well as specialty, and the use of medical services and medications when last ill. We were also interested in how their family members accessed care when ill.

The primary outcome measures were "self prescribing" and "physician consult when last ill". Secondary outcome measures included: 1) type of drugs self prescribed, 2) need for personal physician and 3) whether their family members needed personal physicians or not.
Informed consent was obtained from the participants. The Human Research Ethics Committee of the hospital approved the study. We ensured that responses were anonymous in order to maintain confidentiality.

The Chi-Squared test was used to compare the significance of observed differences between proportions and the student "t" test to compare group means. Logistic regression models including variables with $p < 0.25$ were used to indentify the predictors of self prescribing, physician consult when last ill and whether they and their family members needed personal physicians or not. P values < 0.05 were considered significant. Data was analyzed using EPI Info software for Windows, version 3.3.2 (CDC, Atlanta, Georgia).

RESULTS

Of the two hundred physicians sampled only 147 (116 males and 31 females) returned completed questionnaires giving a response rate of 73.5%. Table 1 shows the characteristics of the respondents. The mean age of the respondents was 34±5 years. The mean number of years of clinical experience of the respondents was 8±5 years with a range of one to 30 years. The majority of the respondents (67.3%) had practiced for less than 10 years.

One hundred and forty five of the 147 respondents (98.6%) had ever self prescribed. Ninety-nine (68.3%) of these had self prescribed within the last three months. The commonest class of drugs self-prescribed was antimalarials (62.5%). Other drugs included: non-steroidal non-narcotic analgesics (16.7%), antibiotics (10%), anti-peptic ulcer drugs (5.8%), bronchodilators (1.7%) and antihypertensives and others (3.3%). Of note was the absence of self prescription of narcotics and psychotropic drugs.

Only 69 (46.9%) of the respondents consulted another physician when last ill. Of these, 29 (42.6%) consulted internists and 18 (24%) consulted family physicians. The other physicians consulted included: general surgeons (9.4%), orthopedic surgeons (7.8%), ophthalmologists (6.4%) and gynecologists (4.9%), otorhinolaryngologists (4.9%). Of the 78 (53.1%) that did not consult a physician, 72 (92.2%) self medicated, three (3.9%) had investigations done and another three (3.9%) did nothing.

A consulting physician's "clinical experience" was not a major factor considered by the respondents (N = 109) in choosing whether to consult a particular physician as it only accounted for 15.6% of reasons why such a physician was consulted. The major factors considered by the respondents in choosing the physician they consulted were the specialty of the physician consulted (42.2%); the physician being in the same unit with them (38.5%), and friendship (15.6%). Four (3.7%) of the respondents would not consider any particular factor for choosing a physician if they have to.

Table 2 compares and contrasts the respondents who consulted physicians against those that did not. Sex, age, number of years of clinical experience and specialty were not associated with whether the respondents consulted physicians or not the last time they were ill. We further stratified age into < 40 and ≥ 40 years and the number of years of clinical practice into < 10 years and ≥ 10 years based on the mean age and mean clinical practice (in years) respectively and explored any relationship between these variables and physician consult by respondents and found no significant association (Table 2).

Only 35 (23.8%) of the respondents treated their family members when they were last ill. Of the remaining 112 respondents, 18 (16.7%) consulted the same physician when their family members were ill. One hundred and fifteen respondents (78.2%) felt they needed a family physician. The predictors of the perceived need

for family physicians are as shown in Tables 3 and 4.

Table 1: Characteristics and health seeking behavior of physicians at the Jos University Teaching Hospital

Parameters	Participants
Characteristics	
Sex (M/F)	116/31
Age, years (mean ± SD)	34±5
Years of clinical practice, mean ±SD (Range)	8±5 (1 - 30)
Years of clinical practice in groups, N (%):	
< 5	29 (19.7)
5 - 9	73 (49.6)
10 - 14	27 (18.4)
15 - 19	11(7.5)
≥ 20	7 (4.8)
Specialty, N (%):	
Medical subspecialty	63 (42.8)
Surgical subspecialty	63 (42.8)
Family Medicine	21 (14.3)

Table 2. Characteristics of physicians at the Jos university teaching hospital that consulted another physician when last ill compared to those that did not

Characteristic	Consulted another physician	Did not consult a physician	p value
Sex, N (%)			
Males	52 (45.2)	64 (54.8)	0.32
Females	17 (55.2)	14 (44.8)	
Age, Years*	34 ± 6	34 ± 5	0.93
Older age, (years)			
< 40	59 (45.7)	70 (54.3)	0.43
≥ 40	10 (55.6)	8 (44.4)	
Years of clinical practice*	8 ± 6	8 ± 4	0.22
Longer clinical practice (years)			
< 10	53 (45.7)	63 (54.3)	0.55
≥ 10	16 (51.6)	15 (48.4)	
Specialty, N (%)			
Medical	29 (46.1)	34 (53.9)	0.50
Surgical	28 (44.4)	35 (55.6)	
Family Medicine	12 (57.1)	9 (42.9)	

* Mean ± SD

Table 3. Univariate analyses of determinants of need for family physician among 147 physicians at the Jos university teaching hospital

Characteristic	Does not need family physician	Needs family physician	p value
Sex*			
Female	4 (12.9)	27 (87.1)	0.17
Male	28 (24.1)	88 (75.9)	
Length of practice*			
> 10 yrs	1 1 (35.5)	20 (64.5)	0.03
< 10 yrs	21 918.1)	95 (81.9)	
Older age, yrs*			
> 40	7 (38.9)	11 (61.1)	0.06
< 40	25 (19.4)	104 (80.6)	

*Results are N (%); yrs = years

Table 4. Determinants of the need for family physicians among 147 physicians at the Jos university teaching hospital on multivariate analysis

Characteristic	AOR	95% CI	p value
Sex	0.42	0.13 - 1.36	0.14
Older age (≥ 40 vs. < 40 years)	0.64	0.17 - 2.52	0.53
Length of practice (≥ 10 vs. < 10 years)	0.47	0.15 - 1.48	0.19

AOR= Adjusted odds ratio

DISCUSSION

The main findings of the study were that majority of the physicians surveyed self-medicated and only about half of the physicians will consult another physician when ill. Additional findings were that the majority of physicians felt they needed physicians for themselves and their family members, although only a quarter would consult a family physician when ill. Antimalarials were the most commonly self medicated drugs. There was no reported self-prescribing of opiates and psychotropic drugs among these physicians.

The results of our study is in keeping with the findings among physicians in the western world where 62% to 99% self prescribe [6-9]. However, in these countries the most frequently self prescribed medications were antibiotics as opposed to antimalarials in our cohort. This is because malaria is endemic in our environment and accounts for 60% of medical outpatient visits, necessitating home based care policy of uncomplicated malaria by the Federal Ministry

of Health[10]. It is therefore not surprising to find that the most common self medicated drugs were antimalarials. Studies from other countries have shown that physicians feel it is acceptable to self-treat for common ailments[11,12] . A striking finding in our study is the absence of self prescribed opiates and psychotropic agents which account for between 2% and 26.6% of agents self prescribed in the western world [1, 8] . This difference may be attributed to the fact that the use of opiates is not common in Nigeria, even in clinical practice. Other factors that could explain the differences include social and cultural variations.

Self prescribing did not differ between male and female physicians among our subjects. Our result is in keeping with the reports of Hem and colleagues among Norwegian young doctors[1] but contrasts with the finding among Finnish doctors where male sex has been associated with more self prescribing[13]. A large national survey involving 9,266 Norwegian doctors, however, found that female sex was as a predictor of self prescribing[8]. The association of sex with self prescribing may thus be epidemiological.

There were no significant difference in years of clinical practice and specialty between physicians who self-medicated and those who consulted other physicians. Similar reports have documented no association of specialty and length of clinical experience with self prescribing[1]. The major factor considered by the respondents in our study in choosing the physician they consulted was the specialty of the physician (42.2%). This is akin to the findings of Chen and colleagues[6] in Hong Kong where the specialty of the physician consulted was the major determinant of whom to consult. Although most physicians in our study believe they need a family physician to provide health care, only 24% consulted one when last ill while others consulted specialists in specific fields. Having a designated family physician is recognized as one of the pillars of good health care for any individual and has been recommended by respected medical associations[5,14] This practice is not established in Nigeria. Nonetheless, where this practice is established, the utilization is variable. Studies from the western world have showed that utilization ranges from 21-100% [15-17]. Utilization of family physicians was found to be low at 14% in Hong Kong (Chen et al). Patronage of family physicians has been shown to vary around the globe with higher patronage in more advanced countries (Australia, 42%[10]; New Zealand, 71%[1]and USA, 75%[11]). The low level of family physician patronage found in Nigeria could be attributed to the structure of health care system in the country, which is not fully developed.

Our study had certain limitations. Firstly, this was a questionnaire based study and thus is prone to recall bias. To circumvent this, we asked more than one question in soliciting for a particular information. Secondly, our study was a single institutional survey and the findings may not be generalizable to all Nigerian physicians, however it forms a bed rock for further research in this area. Additionally, there are no studies in Nigeria (to the best of our knowledge) to compare with our findings. Our study had a high response rate (73.5%) when compared to similar studies (for instance 44% and 67% response rates in the reports of Pullen and co-workers[18] and Wachtel and colleagues[7] respectively) in the western world.

This study provides valuable information on the health seeking behavior of doctors in Nigeria. It is of interest to note that the majority of physicians self medicate and having a family physician is not widely practiced. Guidelines exist regarding physician self prescribing in the western world, however no such guidelines exist in Nigeria. While the drugs self prescribed by Nigerian physicians may seem mild, it is time that the Nigerian Medical Association and the government of Nigeria put in place appropriate guidelines to regulate physician self-prescription. Public enlightenment is needed for adequate utilization of family physicians. There is also the need for restructuring the health system in which the family physician becomes the frontline doctor.

REFERENCES

1. Hem E, Stokke G, Tyssen R, Grønvold NT, Vaglum P, Ekeberg Ø. Self-prescribing among young Norwegian doctors: a nine-year follow-up study of a nationwide sample. *BMC Medicine* 2005, 3:16 doi:10.1186/1741 7015-3-16
2. Christie JD, Rosen IM, Bellini LM, et al. Prescription drug use and self prescription among resident physicians. JAMA 1998:14:1253-1255.
3. Christie JD, Rosen IM, Bellini LM, et al. Prescription drug use and self prescription among resident physicians. JAMA 1998:14:1253-1255.
4. British Medical Association: Ethical responsibilities in treating doctors who are patients. Guidance from

the Ethics Department March 2004 Revised [http://www.bma.org.uk/ap.nsf/Contnet/Hubethicsdoctorpatientrelations]. Accessed October 1, 2005

5. American Medical Association Council on Ethical and Judicial Affairs. Opinion 8.19, self treatment or treatment of immediate family members. In: Code of Medical Ethics: Current Opinions with Annotations. Chicago, Ill: American Medical Association;1998
6. Chen JY, Tse EYY, Lam TP, Li DKT, Chao DVK, Kwan CW. Doctors' personal health care choices: A cross-sectional survey in a mixed public/private setting**.** *BMC Public Health* 2008, 8:183 doi:10.1186/1471-2458-8-183
7. Wachtel TJ, Wilcox VL, Moulton AW, Tammaro D, Stein MD: Physicians' utilization of health care. *J Gen Intern Med* 1995,10**:**261-265
8. Rosvold EO, Bjertness E. Illness behavior among Norwegian physicians. Scand J Public Health;2002:125-132
9. Richards JG. The health and health practices of doctors and their families. N Z Med J 1999;112:96-99.
10. Federal Ministry of Health. Strategic Plan 2009-2013 "A Road Map for Malaria Control in Nigeria. Nigeria and National Malaria Control Programme (NMCP). Abuja, Nigeria. 2009
11. Davidson SK, Schattner PL. Doctors' health-seeking behaviour: a questionnaire survey. *Med J Aust* 2003; 179(6)**:** 302-305
12. Fromme E, Hebert R, Carrese J. Self-doctoring: a qualitative study of physicians with cancer. *J Fam Pract* 2004; 53(4)**:** 299-306
13. Tory S, Rasanen K, Kujala S, et al. Self-reported health, illness, and self-care among Finnish physicians. Arch Fam Med 2000;9:1079-1085
14. Puddester D. The Canadian Medical Association's Policy on Physician Health and Well-being**.** West J Med. 2001;174(1): 5–7
15. Schneider M, Gallaccht MB, Goehring C, *et al*. Personal use of medical care and drugs among Swiss primary care physicians. *Swiss Med Wkly* 2007; 137**:** 121–126.
16. Wines AP, Khadra MH, Wines RD. Surgeon, don't heal thyself: a study of the health of Australasian urologists. *Aust N Z J Surg* 1998; 68(11):778–781.
17. Chambers R, Belcher J. Self-reported health care over the past 10 years: a survey of general practitioners. *Br J Gen Pract* 1992; 42(357): 153–156.
18. Pullen D, Lonie CE, Lyle DM, Cam DE, Doughty MV: Medical care of doctors**.** *Med J Aust* 1995, 162:481, 484.