

Clinical and Socio Demographic Profiles of Complementary and Alternative Medicine Users among Outpatient Clinic Attendees in Uyo, South-South Nigeria

Idung Alphonsus Udo^{1*}, Okokon, Ita Bassey², Udoh Sunday Bassey¹ and Inem Victor Akpan³

¹Department of Family Medicine, Faculty of Clinical Sciences, College of Health Sciences, University of Uyo, Uyo, Nigeria

²Department of Family Medicine, Faculty of Medical Sciences, University of Calabar, Calabar, Nigeria

³Institute of Child Health and Primary Care, Lagos University Teaching Hospital, Idi-Araba, Lagos, Nigeria

Abstract

Background: Complementary and alternative medicine (CAM) is a growing area of Primary care globally. This study aimed at assessing the extent of the use of CAM among adult patients attending the Family Medicine Clinic of University of Uyo Teaching Hospital, Uyo, Nigeria.

Methods: This was a cross sectional descriptive study involving 574 consenting adult subjects aged 18-69 years, recruited over a 6-month period, using a systematic sampling method. An Interviewer administered Questionnaire was used for data collection. Data was analyzed using the 17th version of the Statistical Package for Social Sciences.

Results: Of the 574 subjects studied, two thirds were female 62.9% (n=361). A total of 19.5% men (n=112) and 44.3% (n=254) women respondents respectively, were found in this study to have used CAM (p=0.000).

Married respondents used CAM remedies more frequently than the non-married (p=0.000). There were no statistically significant relationships between place of residence (p=0.007), level of education (p=0.052) and CAM use.

Low and middle level income earners constituted the majority of CAM users here in this study (p=0.000). Herbal remedies were the most frequently used preparations among the respondents accounting for 61.7%. There was statistically significant relationship between CAM use and the presence of hypertension (p=0.001), diabetes mellitus (p=0.001) and osteoarthritis (p=0.001) among respondents in this study.

Conclusion: CAM use is common among middle aged respondents especially the women, married and in middle and low income groups. Lack of standardization of herbal preparation as well as the potential for hazardous drug-drug interactions constitutes the major drawback regarding this choice of therapy. Physicians are encouraged to cultivate interest in interviewing their patients on CAM use to avert any serious adverse reactions arising from the combination of CAM and orthodox drugs.

Keywords: Complementary and alternative medicine; Primary care; Hypertension; Diabetes mellitus; Osteoarthritis

Introduction

Complementary and Alternative Medicine (CAM) is a growing area of Primary care among professionals in both developing and developed countries of the world [1]. Patronage of CAM is predicated on socio-cultural and spiritual issues as well as the nature and severity of the ailments.

The United States National Centre for Complementary and Alternative Medicine (NCCAM) defines CAM as a group of diverse medical and health care systems, practices and products that are not presently considered to be part of conventional medicine [2].

CAM remedies are classified into five areas namely: biological-based therapies and include herbs, vitamins, dietary supplements, health foods and aromatherapy; whole medical systems which include homeopathic medicine, naturopathic medicine, chiropractic, traditional Chinese medicine; mind-body interventions which include meditation, prayer, mental healing, art, dance, music therapy; manipulative and body-based methods like: massage, chiropractic or osteopathic manipulation. It also covers energy therapies including therapeutic touch and electromagnetic fields.

Although social and cultural issues as well as the nature and severity of diseases constitute some reasons for CAM use [3], it is difficult to completely unravel what accounts for the vast level of patronage of unorthodox health products and measures employed as CAM [4].

CAM use has often been seen as popular because of the seeming

harmlessness since most of CAM is considered to be natural. On the other hand, they are detested for their lack of standardization of the dosage regimen, unwanted side effects that arise from the varied nature of combined elements, injuries resulting from mechanical procedure of treatment and increased diagnostic and treatment failures that follow poor training of most providers [5]. Notwithstanding all the above, it must be stressed that CAM has a major persuasive appeal to many people.

In developing countries, however, reports on the prevalence of CAM use are variable and are at best estimates because of the paucity of published literature on the subject.

In Nigeria, there are reports from different parts of the country on the use of CAM by various patient groups. The reported prevalence of CAM use among cancer patients in Enugu, South-East Nigeria was

***Corresponding author:** Idung AU, Department of Family Medicine, Faculty of Clinical Sciences, University of Uyo, Uyo, Nigeria, Tel: +23408069768262; E-mail: dridung@yahoo.com

Received December 02, 2013; **Accepted** March 01, 2014; **Published** March 03, 2014

Citation: Idung AU, Okokon IB, Udoh SB, Inem VA (2014) Clinical and Socio Demographic Profiles of Complementary and Alternative Medicine Users among Outpatient Clinic Attendees in Uyo, South-South Nigeria. *Fam Med Med Sci Res* 3: 117. doi: [10.4172/2327-4972.1000117](https://doi.org/10.4172/2327-4972.1000117)

Copyright: © 2014 Udo IA, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

65% [6]. The various forms of CAM used included: herbs, faith/prayer healing, aloe vera, forever living products, medicinal tea and black stone [6].

Among hypertensive patients seen in an urban tertiary care centre in Lagos, South-West Nigeria, 39.1% reportedly used CAM. Herbal products were the most commonly used CAM type [7]. In yet another report from Lagos, CAM use prevalence of 46% was recorded among patients with diabetes mellitus treated in a tertiary health care delivery facility [8].

There is, however, no population or institutional-based reports on the use of CAM in Uyo, South-South Nigeria.

The present study aimed to describe the extent of CAM use among adult patients who reported for treatment at the Family Medicine Clinic of University of Uyo Teaching Hospital and had used CAM during the 12 months period prior to their presentation in the Clinic.

Findings from this study should sensitize health care providers to be inquisitive regarding non-orthodox forms of treatment that their patients might be taking while in their care with a view to seeking to understand their beliefs and rationale for taking such alternative therapies in order to be able to plan care appropriately. This is especially important since CAM remedies are believed to be cheaper and as such more affordable by many people, majority of whom are poor who cannot afford the ever increasing cost of orthodox medical care.

Materials, Subjects and Methods

Location of the study

This study was carried out at the Family Medicine outpatient clinic of the University of Uyo Teaching Hospital (UUTH). The UUTH is located in the outskirts of Uyo, the capital of Akwa Ibom State of Nigeria. Nigeria is divided into six geo-political zones as follows: North-East, North-West, North-Central, South-East, South-West and South-South. Uyo, the Akwa Ibom state capital is located in the south-south geo-political zone, which is often referred to as the Niger Delta Region of Nigeria.

The Hospital is the only tertiary and referral health institution in the State and its environs and serves a population of about 3.9 million people [9].

Subjects

A total of 574 consenting adult male and female subjects aged from 18 to 69 years attending the Family Medicine Clinic participated in this study.

Sample size for this study was calculated using $n = z^2pq/d^2$ [10], where 'n' is the desired sample size, 'z' represents standard normal deviation set at 95% confidence level which corresponds to 1.96. 'p' is the prevalence of CAM use quoted in this study [6], 'd' is precision which at 95% confidence interval is 5%. The calculated sample size was 349. Two thousand four hundred (2400) respondents were sampled during the study period.

They were recruited using a systematic sampling method with a sampling interval of six. Numbers ranging from one to six were assigned to the first six subjects who met the inclusion criteria. The first respondent was chosen by simple balloting, at which one of the numbers from a basket containing the assigned numbers was selected. Subsequently, every 6th subject was recruited into the study.

Ethical approval for the study was obtained from the UUTH Health

Research and Ethical Committee. A pre-test of the research proforma was performed to determine its applicability, experience and logistic problems.

Methods

This study was conducted from October 2011 to March 2012. Five Hundred and seventy-four respondents aged between 18 and 69 years were recruited after obtaining informed consent from them. A structured and pre-tested questionnaire was used to obtain information about Socio-demographic profile of the respondents.

The level of income of respondents was determined using the Nigerian National Minimum wage act approved by the Nigerian National Assembly [11]. According to the act, low level income earners range from salary grade levels 01 to 07 with a maximum basic monthly income of sixty thousand naira (one US dollar = ₦160.00 approx. currently), middle level income earners range from salary grade level 08-15, with a maximum basic monthly income of one hundred and sixty-five thousand naira, while high level income earners range from salary grade level 16 to 17 with a maximum basic monthly income of two hundred and ninety-five thousand naira. The questionnaire also elicited information about forms of complementary and alternative medicine (CAM) used by the respondents and possible reasons for CAM patronage. Clinical conditions of respondents were diagnosed using standard guidelines. Hypertension was diagnosed based on the joint National Committee on prevention, detection, evaluation and treatment of high blood pressure criteria which uses an average of $>140/90$ mmhg after two readings [12].

Diabetes mellitus was diagnosed based on the 2011 revised criteria by the expert committee on the diagnosis and classification of diabetes mellitus which recommends the diagnosis of diabetes based on two fasting plasma glucose (2FPG) levels of 126 mg/dl (7.0 mmol/l) or higher or 2-hours post-prandial glucose (2hppg) reading of 200 mg/dl (11.1 mmol/l) after a glucose load of 75 g or higher or two casual glucose readings of 200 mg/dl (11.1 mmol/l) or higher or glycosylated haemoglobin of $>6.4\%$ [13].

Osteoarthritis was diagnosed based on the American College of Family Physician diagnostic criteria of joint pain and stiffness of insidious onset occurring in a middle-aged or elderly person involving the knee, hip, hand or spine [14].

Data analysis

Statistical analysis was done using the Statistical package for Social Sciences (SPSS) version 17. Distribution and cross tabulation were generated and Chi-square was used to compare proportions. The p-value of 0.05 was used to determine the level of statistical significance.

Results

Of the 574 subjects recruited into the study, 37.1% (n=213) were males while 62.9% (n=361) were females.

Table 1 shows the Socio-demographic characteristics of the respondents. A total of 19.5% (n=112) male respondents used CAM remedies while the number of female respondents that used CAM remedies was 44.3% (n=254).

Respondents within the age brackets of 40-49 years constituted the highest number {191 (33.3%)} of CAM users in this study.

The number of respondents from the low level income bracket and those of the middle income bracket who used CAM remedies were almost the same: 29.6% (n=170) and 30.1% (n=173), respectively.

VARIABLES	CAM USERS(n=366[%])	NON-CAM USERS(n=208[%])	P-VALUE
GENDER			
MALE	112 [19.5]	101[17.6]	
FEMALE	254[44.3]	107 [18.6]	0.000*
AGE IN YEARS			
UP TO 29	13 [2.3]	24 [4.2]	
30 – 39	53 [9.2]	63 [10.9]	
40 – 49	191[[33.3]	89 [15.5]	
50 – 59	81 [14.1]	28 [4.9]	0.000*
60 – 69	28 [4.9]	4 [0.7]	
MARITAL STATUS			
SINGLE	19 [3.0]	32 [5.6]	
MARRIED	313 [54.5]	159 [27.7]	
DIVOR/SEP.	17 [3.0]	11 [1.9]	0.0001*
WIDOWED	19[3.3]	6 [1.0]	
PLACE OF RESID.			
URBAN	261 [45.5]	125 [21.8]	
RURAL	105 [18.3]	83 [14.5]	0.007
INCOME			
LOW LEVEL	170 [29.6]	81 [14.1]	
MIDDLE LEVEL	173 [30.1]	83 [14.5]	0.000*
HIGH LEVEL	23 [4.0]	44 [7.8]	
LEVEL OF EDUC.			
NO. FORM. EDUC.	7 [1.2]	12 [2.1]	
PRIM. SCH.	13 [2.3]	9 [1.5]	0.052
SEC. SCH.	157 [27.4]	75 [13.1]	
POST SEC. SCH.	189 [32.9]	112 [19.5]	

DIVOR./SEP. => DIVORCED OR SEPERATED
 PLACE OF RESID => PLACE OF RESIDENCE
 NO. FORM. EDUC. => NO FORMAL EDUCATION
 (Intra-group % for users of CAM among those with no formal educ.is 36.8% (n=7))
 SEC. SCH. => SECONDARY SCHOOL
 POST SEC. SCH. => POST SECONDARY SCHOOL

* Statistically Significant

Table 1: Socio-demographic characteristics of respondents using or not using complementary and alternative therapies.

A total of 3.3% (n=19) respondents did not have any formal education; of this, 1.2% (n=7) used CAM remedies, while 2.1% (n=12) did not. This gave an intra-group proportion of 36.8% for users of CAM among the uneducated in this study.

Table 2 shows the breakdown of CAM products used by the respondents. Herbal drugs were the most commonly used CAM products patronized by respondents in this study and accounted for 61.7% (n=226) of CAM remedies used.

Aloe Vera was the next commonly used biological-based CAM remedy, accounting for 4.4% (n=17) of CAM remedies used. Honey was used by 1.8% (n=7) of the subjects.

Faith and prayer healing was used up to 3.4% of the time (n=13) by the respondents.

Among the Alternative systems-based CAM products, homeopathy was the more frequently used remedy, accounting for 7.6% (n=29) of preferred methods.

Massage was the preferred CAM remedy by respondents who used physical therapy and body manipulation. This therapy accounted for 3.1% (n=12) of preferred techniques.

Crude oil was another CAM remedy used by respondents who cited other CAM product class as their preferred choice accounting for 3.9%

(n=4); while python fat and animal extracts accounted for 1.0% (n=4) of preferred CAM choices respectively.

Table 3 shows the reasons given by CAM product users.

The major reason given for CAM use was health promotion and disease prevention (53.3%) Some respondents preferred CAM because it agrees with their beliefs and faith (8.2%); some chose CAM because

TYPES	FREQUENCY OF USE & [%]	TYPES	FREQUENCY OF USE & [%]
BIOLOGICAL PRODUCTS		WHOLE BODY SYSTEMS	
HERBAL DRUGS	226 [61.7]	CHINESE MEDICINE	15 [3.9]
FOREVER LIVING PRODUCT	8 [2.1]	HOMEOPATHY	29 [7.6]
EDMARK PRODUCTS	10 [2.6]		
ALOE VERA	17[4.4]	PHYSICALTHERAPY/BODY MANIPULATION	
TIANSHI PRODUCTS	14 [(3.7]	MASSAGE	12 [3.1]
NONI JUICE	2 [0.5]	MANUAL HEALING	4 [1.0]
GREEN TEA	15 [3.9]	OTHERS	
KEDI PRODUCTS	6 [1.6]	RITUAL SACRIFICE	
HONEY	7 [1.8]	SHARK CARTILAGE	6 [1.6]
ALTERNATIVE SYSTEMS		ANIMAL EXTRACTS	1 [0.3]
SPIRITUAL THERAPY		CRUDE OIL	15 [3.9]
FAITH /PRAYER HEALING	13 [3.4]		

*Multiple Responses given

Table 2: Breakdown of cam products used by respondents*.

	REASONS FOR USE	FREQUENCY	PERCENTAGE
(a)	CONVENTIONAL MEDICNE IS NOT EFFECTIVE	6	1.6
(b)	CAM IS QUICK AND FAST IN ACTION	18	4.9
(c)	CONVENTIONAL MEDICINE IS EXPENSIVE	81	22.1
(d)	CAM REMEDIES ARE NATURAL	173	47.3
(e)	CONVENTIONAL MEDICINE HAS SIDE EFFECTS	25	6.8
(f)	CAM IS MORE IN KEEPING WITH MY BELIEF AND FAITH	30	8.2
(g)	TO PROMOTE HEALTH AND PREVENT DISEASE	196	53.6
(h)	OTHERS	3	0.8

*Multiple Responses given

Table 3: Reasons for using cam remedies*.

VARIABLES	CAM USERS (n=366[%])	NON CAM USERS (n=208[%])	P-VALUE
MEDICAL HISTORY			
HYPERTENSION	106 [18.5]	46 [8.0]	0.001*
DABETES MELLITUS	98 [17.1]	31 [5.4]	0.001*
OSTEOARTHRITIS	112 [19.5]	33 [5.7]	0.001*
OTHERS(UNCLASSIFIED)	50 [8.7]	98 [17.1]	0.004*
MEDICATION HISTORY			
ANTI-HYPERTENSIVE DRUGS	102[17.8]	52[9.1]	0.007*
ANTI-DIABETIC DRUGS	96[16.7]	41[7.1]	0'002*
ANTI-HYPERTENSIVE/ANTI-DIABETIC DRUGS	86[15.0]	46[8.0]	0.021*
STEROIDS	82[14.3]	69[12.0]	0.517

*Statistically Significant

Table 4: Clinical characteristics of respondents using or not using complementary and alternative therapies.

orthodox medicine had side effects (6.7%); while some preferred CAM because of its fast onset of action (4.9%).

Table 4 shows the clinical characteristics of respondents who participated in the study as they were evaluated at the Family Medicine outpatient Clinic.

A total of 18.5% (n=106) respondents who used CAM products were diagnosed with hypertension while 8.0% (n=46) respondents who were hypertensive did not use CAM. A total of 19.5% (n=112) respondents who were diagnosed with osteoarthritis (OA) used CAM remedies, while 5.7% (n=33) respondents did not use CAM remedies.

Out of a total of 25.8% (n=148) respondents whose ailments were not classified, 8.7% (n=50) used CAM remedies.

One hundred and two respondents (17.8%) who were on anti-hypertensive medication also used CAM remedies, while 52 (9.1%) did not use CAM. Eighty-six respondents (15.0%) who were both on anti-hypertensive and anti-diabetic therapy used CAM remedies while 46 (8.0%) did not use CAM. Eighty two (n=82) respondents (14.3%) on steroids used CAM remedies, while 69 (12.0%) did not use CAM.

Discussion

The frequency of CAM use in this study was 19.5% for male and 44.3% for female respondents.

Different workers in various parts of Nigeria have reported differing frequency of CAM use among many patient groups ranging from 65% among cancer patients [6], 39.1% among hypertensives [7] and 46% among patients with diabetes mellitus [8]. The result of this study, adds to that position. The possible reason may be that laws that regulate the sales, advertisement and distribution of Complementary and Alternative therapy in Nigeria are not stringent while access to these modalities of care is largely unrestricted [15,16].

Moreover, practitioners of Complementary and Alternative medicine offer unlimited range of therapeutic claims which are powerfully tempting for consumers who perceive CAM therapies to be better and safer than Orthodox Medicare.

It is therefore necessary that physicians ascertain if their patients are taking CAM therapies, and those who do, must be properly counselled in terms of their illness, beliefs and rationale for patronizing such alternative therapies [16,17].

Another significant finding of this study is that CAM therapy was more prevalent among respondents between 40 and 49 years of age (p=0.000). The reason for increased popularity of CAM among people in the middle age bracket is not very clear, but may be related to their health seeking behaviour. Further study in this regard is hereby advocated.

Married respondents constituted the largest proportion of CAM users in this study (p=0.000). This finding is similar to a community-based report among adult respondents presented by Onyiaapat, Okoronkwo and Ogbonnaya working together in Enugu, South East Nigeria [17]. The persuasive appeal of alternative therapies to married people may be related to beliefs regarding the nature and meaning of health and illness [17].

Low Level and middle level income earners patronized CAM therapy more than high income earners in this study (p=0.000). Again, this finding bears agreement with the report from Enugu [17]. It could be argued that the high level of patronage of CAM by respondents in

these income brackets is due to the seeming low cost of CAM compared to orthodox medical care.

The very low intra-group percentage of users {36.8% (n=7)} of CAM among those with no education in this study is difficult to explain since poverty and low education usually present together. In this study, herbs were the most frequently patronized CAM therapy, Amira and Okubadejo [7], also reported high prevalence of herbs use among hypertensive patients attending an urban tertiary health institution in Lagos, South-West Nigeria.

It is known that between 65 and 80% of the World's population use herbal medicines as their primary form of health care [17]. In Nigeria, indigenous medicinal plants form an important component of the natural wealth of the people [18]. The popularity of herbs among Nigerians is related to its low cost and easy availability, the naturalness of its source as well as the beliefs in the supernatural causes of diseases among the people.

Despite the fact that herbal medicine use is increasing, most herbal remedies have not undergone careful scientific assessment and standardization. It is equally true that some of these CAM products have the potential to cause serious toxic effects because of interactions with other orthodox or non-orthodox drugs that may be taken concurrently [19].

Thus, health care providers should be familiar with the most common herbal medicines, especially their potential for adverse effects and drug interactions to be able to counsel patients appropriately. Orthodox health care providers need to be more willing to discuss the use of CAM with their patients [20].

Most of the respondents used CAM therapies to promote and maintain health because of the natural source of some components. These findings agree with reports from other studies which showed the increasing popularity of CAM especially herbs in the treatment of most health conditions because of their perceived natural source of origin, with less potential to cause side effects [7,16,18,21].

Most respondents with various medical conditions such as hypertension, diabetes mellitus, osteoarthritis and other clinical conditions reportedly used CAM therapies in this study.

This is in agreement with reports by other workers in different parts of Africa including Nigeria [6-8].

The popularity of CAM among respondents may not be unconnected with the belief that CAM remedies are cheaper than orthodox medicine and are thus easily affordable by majority of the respondents who were mostly low income earners. Other attractions to alternative therapies may be related to the power of the underlying philosophies inherent in CAM, such as closeness to nature, spirituality and the fact that these remedies often go along with the cultural belief of the people [22].

Findings from this study also show that respondents who were on treatment with other forms of medications also used CAM therapies [6-8]. This is particularly dangerous because of the potential danger that could arise from the combination of orthodox and CAM therapies [5]. Consequently, health care providers should be familiar with the most common CAM therapies especially their potential for adverse effects and major drug-to-drug interactions.

Conclusion

In Conclusion, findings from this study show that the use of CAM therapies is common among respondents seen in the Family Medicine Clinic of University of Uyo Teaching Hospital.

This underlines the need for physicians to be more pains-taking in interviewing patients regarding their current use of CAM before commencing orthodox treatment. Such efforts would avert drug-drug interaction in the midst of patients who harbour varying beliefs on approaches to treatment and create room for proper counselling on the need for caution regarding the use of CAM products.

References

1. Ernst E (2000) Prevalence of use of complementary/alternative medicine: a systematic review. *Bull World Health Organ* 78: 252-257.
2. <http://nccam.nih.gov/>
3. Onyapat JL, Okoronkwo IL, Ogonnaya NP (2011) Complementary and alternative medicine use among adults in Enugu, Nigeria. *BMC Complement Altern Med* 11: 19.
4. Astin JA (1998) Why patients use alternative medicine: results of a national study. *JAMA* 279: 1548-1553.
5. Niggemann B, Grüber C (2003) Side-effects of complementary and alternative medicine. *Allergy* 58: 707-716.
6. Ezeome ER, Anarado AN (2007) Use of complementary and alternative medicine by cancer patients at the University of Nigeria Teaching Hospital, Enugu, Nigeria. *BMC Complement Altern Med* 7: 28.
7. Amira OC, Okubadejo NU (2007) Frequency of complementary and alternative medicine utilization in hypertensive patients attending an urban tertiary care centre in Nigeria. *BMC Complement Altern Med* 7: 30.
8. Ogbera AO, Dada O, Adeyeye F, Jewo PI (2010) Complementary and alternative medicine use in diabetes mellitus. *West Afr J Med* 29: 158-162.
9. World Health Organization (WHO) newsletter, Quarterly Bulletin of the World Health Organization, Nigeria 2007 18: 7.
10. Rao KV (2007) Determination of sample size: In K. Visweswara RAO (eds). *Biostatistics, a manual of statistical methods for use in Health, Nutrition and Anthropology*, Jaypee Brothers (Medical publishers(P) LTD.
11. National Minimum Wage Act, Cap N61 Laws of the Federation of Nigeria 2004 as amended by Act 2011.
12. Chobanian AV, Bakris GL, Black HR, Cushman WC, Green LA, et al. (2003) The seventh Report of the joint National Committee on prevention, detection, evaluation and treatment of high blood pressure: The JNC 7 report *JAMA* 289: 256-272.
13. International diabetes federation (IDF) 6th Edition of the diabetes atlas, 2011.
14. Manek NJ, Lane NE (2000) Osteoarthritis: current concepts in diagnosis and management. *Am Fam Physician* 61: 1795-1804.
15. Adisa R, Fakeye TO (2006) Assessment of knowledge of Community Pharmacists regarding common phytopharmaceuticals sold in South Western Nigeria. *Tropical J Pharm Res* 5: 611-625.
16. Crone CC, Wise TN (1998) Use of Herbal Medicine among – Consultation – liaison populations. A review of current information regarding risks interactions and efficacy. *Psychosomatics* 39: 3-13.
17. World Health Organization: Traditional Medicine Fact sheet Number 134.
18. Igoli JO, Ogaji OG, Tor-Anyim TA, Igoli NP (2005) Traditional Medicine practice amongst the Igede People of Nigeria, Part II. *Afr J Trad CAM* 2: 134-152.
19. Sood A, Sood R, Brinker FJ, Mann R, Loehrer LL, et al. (2008) Potential for interactions between dietary supplements and prescription medications. *Am J Med* 121: 207-211.
20. Ashar BH, Rowland-Seymour A (2008) Advising patients who use dietary supplements. *Am J Med* 121: 91-97.
21. World Health Organization (WHO): Traditional Medicine Strategy 2002 - 2005 Geneva: WHO.
22. Kaptchuk TJ, Eisenberg DM (1998) The persuasive appeal of alternative medicine. *Ann Intern Med* 129: 1061-1065.