

Pattern and Practice of Complimentary and Alternative Medication amongst Patients in a Tertiary Hospital in Nigeria

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Abstract: Background: Attention and interest in the use of Complementary and Alternative Medicine (CAM) has been reawakened globally. Evidence from studies carried out in different parts of the world has established that CAM use is very common and varies among populations. It has been observed that many adults use different health products or measures under the umbrella of CAM. Reason for use could either be that they are imported or approved by National Agency for Food, Drug Administration and Control (NAFDAC), or they are believed to promote health, with little or no knowledge about the compositions, uses and side effects. Alternative medical treatments are believed to be prevalent in the indexed community and environs. However, reliable prevalence rates do not exist because a majority of the studies conducted to evaluate this topic cannot be generalized as they were conducted in other communities with their attendant influencing factors such as culture, religion etcetera. This study has therefore made an attempt to determine the prevalence, pattern, practice and factors associated with use of alternative medication amongst patients presenting at the NnamdiAzikiwe University Teaching Hospital (NAUTH). Objectives: The aim of this study was to determine the pattern and practice of Complementary and alternative medication amongst patients presenting at the NnamdiAzikiwe University Teaching Hospital, Nnewi. Method: This was a Cross-sectional descriptive study. Multi-staged sampling technique was used. Data was collected using interviewer -administered, semi-structured questionnaires. Data was analysed manually, with the aid of a scientific calculator. Results: A total of 128 respondents participated in the study. The mean age was 38.4 years (+ 3.04). 70% of the study population fell into the low income category, 96.1% had some knowledge of CAM remedies with a majority (79.69%) of the study population obtaining their knowledge from friends and peers. The study population had a CAM usage prevalence of 89.9%, with women making up majority of this percentage (48% of the study population). 56.52% of the study population used and were using 1 – 5 different types of CAM remedies with 64% being occasional users, 19% never used again after the first usage, while 17% of the study population were regular users. The most commonly practiced method of CAM was the biological products followed by spiritual therapy and mind body systems. Major reasons for using CAM remedies among the study population include: the need to promote and maintain their health, the availability of CAM remedies and the expensive cost of conventional medicine. Conclusion: Bearing in mind the high prevalence of CAM usage in the index community, there is need for adequate policy formulation and regulation to ensure safety and efficacy of CAM products. Measures to ensure rational use of CAM should be instituted.

Keywords: Complimentary Medicine, Patients, Tertiary Hospital

1. Introduction

Alternative Medicine has no commonly accepted definition, but one definition developed at a 1997 conference

of the United States Office for Alternative Medicine of the National Institutes of Health and subsequently adopted by the Cochrane Collaboration and the Ministerial Advisory Committee on complementary and alternative medicine is:

“Complementary and alternative medicine (CAM) is a

broad domain of healing resources that encompasses all health systems, modalities and practices and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health system of a particular society or culture in a given historical period. CAM includes all such practices and ideas self-defined by their users as preventing or treating illness or promoting health and well-being".⁽¹⁾⁽²⁾

The world health organization goes further to simplify the understanding of complementary and alternative medicine, defining it as follows:

"Complementary and alternative medicine (CAM) refers to a broad set of Health care practices that are not part of a country's own tradition and not integrated into the dominant health care system. Other terms sometimes used to describe these health care practices include 'natural medicine', 'non-conventional medicine' and 'holistic medicine'.⁽³⁾

Attention and interest in the use of alternative medicine has been reawakened globally. Evidence from studies carried out in different parts of the world has established that alternative medication is very common and varies amongst populations. The most popular include herbs, acupuncture, non-vitamin, non-mineral, natural products, faith/prayer healing, among others⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾.

CAM as used in this study is an umbrella term which includes traditional medicine in-addition to other western remedies and/or strategies that are not conventional e.g. forever living products, Tianshi etcetera. Studies carried out in a rural sector of the United States revealed that 47% of patients reported using at least one form of alternative medicine during the past year⁽⁸⁾. In developing countries, the prevalence of CAM use has been described by very few studies. Available literature indicates that few studies have evaluated the prevalence of CAM use in the general population⁽⁷⁾. A prevalence rate of 38.5% was recorded among the general population of Indians living in Chatsworth, South Africa with the most common being herbs and spiritual healing⁽⁹⁾. A study on self-reported use of CAM in Jeddah western Saudi observed that over 80% of the populations in developing countries depend on CAM products and/or traditional healing modalities, including herbal remedies, for health maintenance and therapeutic management of disease⁽¹⁰⁾.

In Nigeria, studies carried out on prevalence of CAM use were among cancer patients. Out of the 160 patients interviewed on the use of CAM, a prevalence rate of 65.0% was recorded among cancer patients at the University of Nigeria Teaching Hospital (UNTH) Enugu, Nigeria⁽⁷⁾. This study was therefore aimed at determining the pattern and practice of alternative medication amongst patients presenting at the NnamdiAzikiwe University Teaching Hospital, Nnewi.

2. Methodology

NnamdiAzikiwe University Teaching Hospital (NAUTH) is a tertiary healthcare facility located in the Metropolitan

area of Nnewi, Nnewi-North Local Government Area, Anambra State, Nigeria. The target population for this study were consenting adults presenting at NnamdiAzikiwe University Teaching Hospital for medical care. Only individuals who were 18years and above, consented, and were conscious enough to participate in the study were recruited. The study was a cross-sectional descriptive survey. An interviewer-administered, semi-structured questionnaire was used. Data collected was analysed manually using scientific calculator. Written informed consent was obtained from the participants.

3. Sample Size Determination

The minimum size of the finite population (<10,000) was determined using the formula⁽¹¹⁾:

$$nf = n / (1 + (n/N))$$

$$n = (Z^2 pq) / d^2$$

Where nf is the desired sample size.

Where n is the required sample size when the population size is >10,000

N is the estimate of the population which is 807 (obtained from the hospital's records department)

Z is the standard normal deviate at 95% confidence level = 1.96

P (prevalence) is the population of the target population with correct knowledge of complementary and alternative medicine (CAM) and practice CAM which is 84.7 %, based on a previous study⁽⁴⁾.

$$p = 84.7\% = 0.847$$

$$q = 1 - p = 1 - 0.847 = 0.153$$

$$d \text{ (Degree of precision)} = 0.05$$

$$nf = 128$$

Sampling Technique: Multistage Sampling technique was used:

Stage 1: Four clinics and wards were selected from all the clinics and wards in NAUTH by simple random sampling. The clinics included the Haematology and Gynaecology clinics, while the wards selected included the Medical and Surgical wards.

Stage 2: Simple random sampling method was used to select 32 patients from each of the clinics/wards.

4. Results

Table 1. Sex distribution of Study population.

SEX	FREQUENCY	PERCENTAGE
MALES	56	43.75%
FEMALES	72	56.25%

Table 2. Highest level of Education (HLE) Attained by study population.

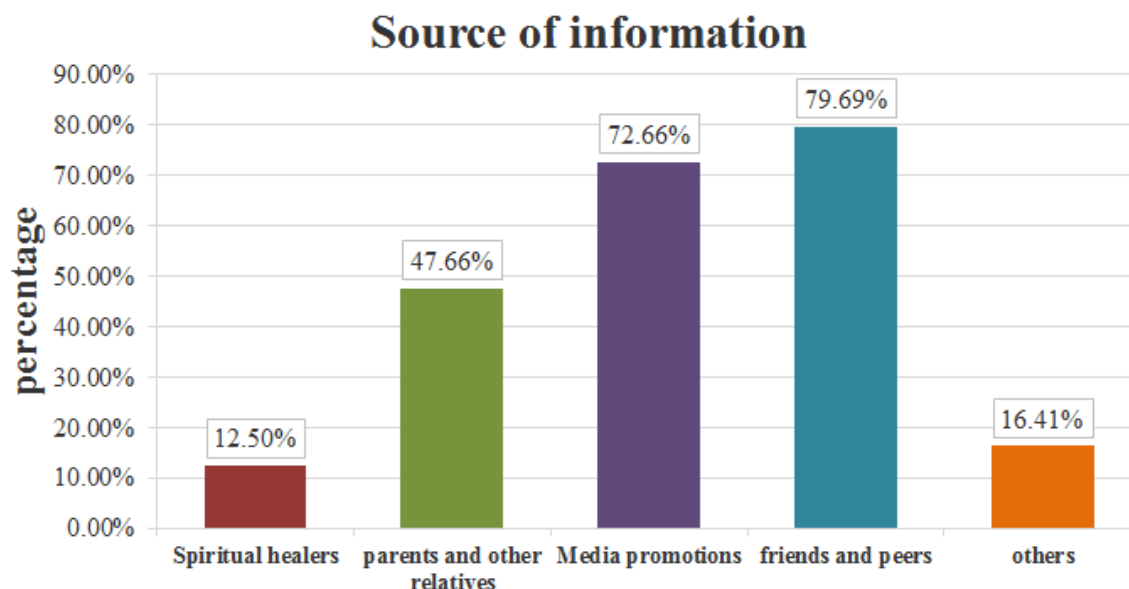
HLE	Frequency	Percentage
No formal Education	6	5%
Primary Education	22	17%
Secondary Education	55	43%
Tertiary Education	45	35%

Table 3. Knowledge of CAM among study population.

Knowledge	frequency	percentage
Those with Knowledge of CAM	123	96.1%
Those without Knowledge of CAM	5	3.9%

Table 4. Use of CAM among Study population.

CAM Use	Frequency	Percentage of Study population
Those Who Use CAM	115	89.8%
Those Who do not use CAM	13	10.2%

**Figure 1.** Other sources of information as per Knowledge of CAM includes Books and individuals witnessing the use of CAM firsthand.**Table 5.** Distribution of monthly income level among CAM users.

Estimated Income	Frequency	Percentage
Less than ₦50,000	57	49.6%
₦50,000 – 100,000	23	20%
More than ₦100,000	10	8.7%
Unemployed	25	21.7%

Table 6. Number of CAM used by the respondents.

Number of CAM	Frequency	Percentage
1 – 5	65	56.52%
6 – 10	46	40%
11 – 15	4	3.48%
16 – 20	0	0%
20 – 25	0	0%
TOTAL	115	100%

Table 7. Reasons for the use of CAM by the respondents.

Reasons for Using CAM remedies	Frequency	Percentage
Conventional Medicine is not always effective	30	26.1%
CAM remedies are quick or fast in action	46	40%
Conventional Medicine is too expensive	51	44.3%
CAM remedies are Natural	49	43%
Conventional Medicine has side effects	8	7%
CAM remedies are in keeping with one's faith and belief	32	28%
To promote and maintain one's health	61	53%
CAM remedies where easily available	59	51%
Others	13	11%

5. Discussion

Various studies carried out to determine the prevalence of CAM use varies greatly in both developed and developing countries^(12,7,13,9,14). Figures have ranged from 7% to 83%^(7,13,9), but the average rate across adult studies has been 31.4%⁽¹²⁾. In this Study a high prevalence was found, so far one of the highest reported in literature. 96.1% of the study population had some knowledge of CAM while 89.8% of the population have used and are currently using CAM remedies. These results however can be related to another study carried out by Onyia et al⁽¹⁴⁾ on complementary and alternative medicine use among adults in Enugu, Nigeria. In that study an equally high prevalence of 84.7% was obtained.

These results obtained from studies carried out in Nigeria could be as a result of what is included under the umbrella of CAM, the nature, cultural values, belief systems, religious underpinnings and practices of our society, as well as the cost and degree of accessibility of conventional medicine. Many Nigerians still utilize traditional medical practices to treat diseases and ailments despite current emphasis on conventional treatments and remedies. This high prevalence rates however do not agree with the study carried out on American adults where a low prevalence of 36% in 2002, and 38.3% in 2007 were reported respectively.

Demographic variations associated with prevalence of CAM have been reported in many studies. Some studies have found associations between age, gender, socio-economic status and level of education. Studies in developed countries

found that women have higher prevalence of use than men, and that peak age of use is among young adults / middle aged (15, 10). Also higher income, higher level of education and higher socio-economic status have been linked to higher prevalence of CAM use. In this study, females were more inclined to use CAM remedies more than males while usage of CAM increased with low income level. This greater female gender prevalence can be attributed to the fact that females have the motherly instinct in them and would leave no stones unturned in ensuring the good health of themselves and their families. This is illustrated by the findings on major reasons for CAM use among study population, where the highest response (53%) was in favour of CAM usage to maintain one's health. In addition, hospitals especially tertiary health institutions like NAUTH are perceived by consumers to be time consuming and expensive while CAM is seen to be accessible, affordable and not time consuming.

Most of the respondents (70%) were classified as low income earners and poverty may have contributed to the use of CAM. Nigeria is a developing country with more than 70% of the population living in rural areas and half the population survive on less than 1 dollar per day (16). In addition, with most CAM products easily accessible and affordable, people will most likely resort to the use of CAM remedies as against the more expensive conventional therapies coupled with the fact that the national health insurance scheme is not fully effective nationwide. Most of the studies carried out in developing countries on CAM use have been carried out on middle and high income groups. This could account for the disparities in the association between socio-demographic and economic profiles and ultimately frequency of CAM use.

On the average, five different forms of CAM were used by each adult. This high ratio may reflect an easy access to these CAM products and "fashion" trends over time. Also worthy of note is the fact that in the study population, prayer healing was found to be another common therapy used by the respondents. Religion has always enjoyed high favour with most African communities and this could be responsible for the increased number of people who used prayer/faith healing to ease health conditions. A study in South Africa recorded that herbs and spiritual healing were the two most common forms of CAM used among Indians in the region (9).

Still on the peculiarities of the African populace, the use of traditional medicine to treat or relieve symptoms of ill-health has never been far from the lives of an indigenous African population. Combination of many forms of CAM to get all the possible benefits is a common phenomenon. It was not surprising to find many adults in this study use biological products including honey and herbs to improve their quality of life and for treatment of certain diseases. This has given birth to new trends of biomedics under the brand names of forever living products, Aloe Vera, GNLD, Tianshi, etc. This trend which has been there, since the primitive era shows no signs of slowing. The multi-level marketing strategies as well as the advert that portray these products as natural herbs, fruits and food supplement are responsible for their

popularity among the black population. The African man's affinity for nature also explains why a significant number of the respondents utilize items like crude oil, black stone, while some went as far as Urine therapy.

Major reasons for CAM use as reported by the respondents include their being natural and to promote and maintain health. These findings are in line with other studies that reported the growing public acceptance of herb and other products because they are generally perceived to be more natural with fewer side effects, as well as influence well-being and quality of life (12, 17). In contrast, findings from this study did not agree with results of other studies conducted in developing countries (7, 18) which reported that most people expect CAM to treat or cure their ailments. This variation could be as a result of the characteristics of the study population. The present study was carried out among adults whose health status was generally satisfactory while studies in other developing countries were conducted among cancer patients who were sick.

6. Conclusion

This study has shown that a great majority of the study population have knowledge of CAM, a great percentage of the knowledge comes from friends and peers and the media. There is also a high prevalence of CAM use among the respondents, with biological products and spiritual therapy being widely used. The flare for natural things and the innate urge in man to try new, relatively cheap and alternative ways to promote and maintain health supports the high preference for CAM use. The fact that some of these products are approved by NAFDAC and are easily accessible has increased the perception that they are natural and safe. This trend which is neither static nor decreasing is likely to continue if there is no control by the National drug-safety monitoring system. There is need for regulation by the appropriate authority to ensure evidence of safety, efficacy and rational use of CAM. Although this study cannot be applied to the general Nigerian population, it has increased the body of knowledge on CAM use by adult population.

Recommendations

In View of the findings mentioned above, the following recommendations are made.

1. Future studies should be encouraged to examine the prevalence of CAM use at the national level and among different socio cultural groups.
2. More attention should be paid by the government and various research bodies to CAM; more researches into their effectiveness and possible toxicity or adverse effects should be carried out in order to provide the public with information regarding the CAM remedies and their usage.
3. Government should scrutinize media promotions of Alternative therapies to ensure publication of only authentic claims.

4. Government should control sale of alternative therapies and services to minimize unmonitored and harmful usage.
5. Government should organize community outreaches to help educate masses on the proper usage of CAM so as to reduce abuse.

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