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Research Article

Complementary and Alternative Medicine (CAM) Use among Psychiatric Patients in Northwest Nigeria

¹Abdulgafar Olayiwola Jimoh, ²Abdulfatai Tomori Bakare, ¹Umar Muhammed Tukur, ³Usman Balarabe, ¹Lukman Ahmed Jamil and ¹Abubakar Ridwan Zauro

¹Department of Pharmacology and Therapeutics, Faculty of Basic Clinical Sciences, College of Health Sciences, Usmanu DanFodiyo University (Teaching Hospital Complex) Sokoto, Nigeria

²Department of Psychiatry, Usmanu Danfodiyo University Teaching Hospital Sokoto, Nigeria

³Faculty of Pharmaceutical Sciences, Usmanu Danfodiyo University Sokoto, Nigeria

Abstract

Background and Objective: There has been a reported increase in the use of complementary and alternative medicine among patients generally, a potential risk of non-compliance and interaction which may affect outcome when concomitantly used with orthodox medicine. Mental disorders are highly prevalent in both the developed and the developing world with hundreds of millions of people suffering from psychiatric morbidity. The objective of this study was to describe the prevalence and determinants of complementary and alternative medicines (CAM) use among psychiatric patients. **Materials and Methods:** The study was a descriptive cross-sectional study carried out among psychiatric outpatients in two tertiary hospitals in Sokoto state north-western Nigeria (the Usmanu Danfodiyo University Teaching Hospital (UDUTH) Sokoto and Federal Neuropsychiatric Hospital (FNPH) Kware), between February and May 2014. An interviewer-administered structured questionnaire was used to collect the data on socio-demographic, clinical and CAM use variables. Data was extracted and analysis was done using the statistical package for social sciences (SPSS) version 18.0. **Results:** A lifetime CAM use and for psychiatric disorders of 64.8 and 53.8% with only about a third current users and majority of the respondents found to have used herbal drinks and prayers in UDUTH and FNPH, respectively. Although a small proportion of the respondents preferred CAM to orthodox medications in both hospitals, however about one third of the respondents spent only 1,000 Nigerian Naira on CAM in UDUTH and FNPH. Majority of the study population in both hospitals were within the age bracket of 21-40 years. Age, gender, duration of onset of illness and cost were some of the socio-demographic determinants that influence the use of CAM in this study. **Conclusion:** In this study, prevalence of CAM use was high among psychiatric patients. Age, gender, disease duration and cost are part of the determinants of CAM use.

Key words: Psychiatric disorders, complementary and alternative medicine, psychiatric patients, orthodox medications, psychiatric morbidity, mental disorders

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Corresponding Author: Abdulgafar Olayiwola Jimoh, Department of Pharmacology and Therapeutics, Faculty of Basic Clinical Sciences, College of Health Sciences, Usmanu DanFodiyo University (Teaching Hospital Complex) Sokoto, Nigeria Tel: +2348035950558

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Data Availability: All relevant data are within the paper and its supporting information files.

INTRODUCTION

Several studies have been carried out with regards to complementary and alternative medicine in different demographics and diverse patient population, but there is dearth of information with regards to use of complementary and alternative medicine among psychiatric patients especially the prevalence and determinants associated with the use. Available literatures have not described lifetime and current CAM users among psychiatric patient population especially in this geopolitical zone. Such information when provided gives an idea of the magnitude of CAM use among such patient population and reasons for such use; this will in turn help predict whether CAM use can affect psychiatric patient management and outcome. Complementary and alternative medicine (CAM) can be explained as a term commonly used for all forms of therapy that is not in line and not considered part of modern day orthodox medicine¹. There is an increasing acceptance of CAM among Nigerians as is obtained in other parts of the world² and this may not be unconnected to the significant side effects associated with conventional therapy³. The World Health Organization opines that over 75% of world population have used CAM to treat medical conditions suggesting that CAM is popular across board among patients⁴. Broadly conceptualized, the term "complementary and alternative medicine" (CAM) refers to treatments not considered to be standard to the current practice of western medicine. "Complementary" refers to the use of these techniques in combination with conventional approaches, whereas "alternative" refers to their use in lieu of conventional practices⁵. Potential risks associated with CAM use could be non adherence to orthodox medications, drug interactions and adverse drug reactions⁶, delay in effective treatment for serious condition, interference with vital treatment, exploitation of vulnerable groups such as children and the seriously ill, overloading patient with multiple medications, toxicity, side effects, interactions and adulteration with pharmaceutical substances⁷.

Psychiatric disorders and related complications are a cause of significant morbidity and inflict a substantial strain on a nation's economy⁸. Results from the WHO World Mental Health Consortium demonstrate that common mental disorders are highly prevalent in both the developed and the developing world⁹. The majority of the world's 450 million people who suffer from psychiatric morbidity live in developing countries and less than 10% have access to mental health care¹⁰.

The concurrent use of Complementary and Alternative Medicine (CAM) with orthodox medicine may be part of causes of drug interactions, noncompliance, adverse drug reactions and poly-pharmacy in patients. Nigeria is part of countries in the world where the uses of Complementary and Alternative Medicine (CAM) is common, but there is dearth of information on the prevalence of their use and factors influencing the use among psychiatric patients. This study therefore was aimed at determining the prevalence and determinants of complementary and alternative medicines use among psychiatric outpatients.

MATERIALS AND METHODS

The study was conducted among psychiatric outpatients in two tertiary health facilities in Sokoto state (Usmanu Danfodiyo University Teaching Hospital Sokoto and Federal Neuropsychiatric Hospital Kware, both in north western Nigeria). A cross sectional descriptive study was carried out between February and May 2014. A total of 211 psychiatric outpatients were recruited. An interviewer-administered structured questionnaire was used and data was obtained in a face-to-face interview. Data on socio-demographic, clinical and CAM use variables were extracted. Data analysis was performed using descriptive statistics of the Statistical Package for Social Sciences for windows version 18.0. Ethical clearance was obtained from the ethics and research committee of the Usmanu Danfodiyo University Teaching Hospital, Sokoto (UDUTH/HREC/2014/No. 244).

RESULTS

The data in Table 1 described the demographic variables of the study populations from Usmanu Danfodiyo University Teaching Hospital Sokoto (UDUTH) and Federal Neuropsychiatry Hospital Kware (FNPH). Majority of the respondents were within the age group of 21-40 years with more males than females and predominantly from the Hausa ethnic group and Islamic religion in both facilities. Majority of the respondents in UDUTH are married while majority in FNPH are not. Majority of the study population in UDUTH had at least a child while majority in FNPH had no child. About one third of the respondent had up to tertiary education in UDUTH with overall majority having at least up to secondary school education and residing in urban or semi urban settlements in both hospitals. Over one half of the study population either earns less than 10,000 NGN per month or nothing at all.

Table 1: Socio-demographic variables of respondents

	UDUTH		FNPH	
	Frequency	Percentage	Frequency	Percentage
Age (Years)				
10-20	14	8.8	3	5.8
21-30	55	34.6	31	59.6
31-40	50	31.4	12	23.1
41-50	28	17.6	6	11.5
>50	12	7.5	0	0.0
Total	159	100	52	100
Gender				
Male	81	50.9	41	78.8
Female	78	49.1	11	21.2
Total	159	100	52	100
Marital status				
Married	97	61.0	17	32.7
Widowed	2	1.3	4	7.7
Separated	6	3.8	1	1.9
Divorced	5	3.1	1	1.9
Not married	49	30.8	29	55.8
Total	159	100	52	100
Ethnicity				
Hausa	130	81.8	43	82.7
Yoruba	9	5.7	2	3.8
Igbo	7	4.4	2	3.8
Others	13	8.2	5	9.6
Total	159	100	52	100
Religion				
Islam	145	91.2	47	90.4
Christian	14	8.8	5	9.6
Total	159	100	52	100
Number of offsprings				
1-5	74	46.5	17	32.7
6-10	23	14.5	1	1.9
>10	1	0.6	1	1.9
None	61	38.4	33	63.5
Total	159	100	52	100
Educational status				
Quranic/arabic	14	8.8	12	23.1
Primary	14	8.8	7	13.5
Secondary	62	39.0	16	30.8
Tertiary	53	33.3	9	17.3
None	16	10.1	8	15.4
Total	159	100	52	100
Place of residence				
Urban	64	40.3	12	23.1
Semi urban	47	29.6	28	63.8
Rural	48	30.2	12	23.1
Total	159	100	52	100
Income per month				
1,000-10,000	52	32.7	18	34.6
11,000-20,000	24	15.1	6	11.5
21,000-30,000	14	8.8	9	17.3
31,000-40,000	8	5.0	3	5.8
>40,000	8	5.0	1	1.9
None	53	33.3	15	28.8
Total	159	100	52	100

N = 211, UDUTH: Usmanu Danfodiyo University Teaching Hospital and FNPH: Sokoto and Federal Neuropsychiatric Hospital

Table 2: Clinical variables of respondents

	UDUTH		FNPH	
	Frequency	Percentage	Frequency	Percentage
Duration from onset of mental illness				
1-12 Months	19	11.9	2	3.8
1-5 Years	77	48.4	39	75.0
>5 Years	65	39.6	11	21.2
Total	159	100	52	100
Age at onset of mental illness				
1-20	24	15.1	3	5.8
21-40	94	59.1	48	92.3
41-60	39	24.5	1	1.9
>60	2	1.3	0	0.0
Total	159	100	52	100
Associated comorbidities				
Diabetes	8	5.0	1	1.9
HIV/TB	10	6.3	5	9.6
Hypertension	5	3.1	0	0.0
Others	32	20.1	2	3.8
None	104	65.4	44	84.6
Total	159	100	52	100
History of substance abuse				
Yes	8	5.0	24	46.2
No	151	95.0	28	53.8
Total	159	100	52	100
Problems with hospital medications				
Yes	20	12.6	3	5.8
No	139	87.4	49	94.2
Total	159	100	52	100
Improvement with hospital medications				
Yes	151	95.0	51	98.1
No	8	5.0	1	1.9
Total	159	100	52	100
Monthly expenditures on hospital medications				
5,00-1,000	32	20.1	4	7.7
1,000-1,500	15	9.4	22	42.3
1,500-2,000	46	28.9	22	42.3
>2,000	66	41.5	4	7.7
Total	159	100	52	100

N = 211, UDUTH: Usmanu Danfodiyo University Teaching Hospital and FNPH: Sokoto and Federal Neuropsychiatric Hospital

Results in Table 2 depicted the clinical variables of the study populations from UDUTH and FNPH. Duration from onset of psychiatric condition was 1-5 years while age at onset was 21-40 years and the absence of co-morbidities in most of the respondents in both hospitals. Only a small fraction of respondents from UDUTH has substance abuse problems. Significant proportions of the study population had no problem with Hospital/ orthodox medication and admit to improvement in their condition with use of Hospital medications in both facilities. Monthly expenditure on Hospital medications by the study population in both facilities varies as displayed.

Data in Table 3 showed the complementary and alternative medicines use variables of the respondents in

Table 3: Complementary and Alternative Medicine (CAM) Use Variables of Respondents

	UDUTH		FNPH	
	Frequency	Percentage	Frequency	Percentage
Idea of varieties of CAM used locally				
Yes	92	57.9	29	55.8
No	67	42.1	23	44.2
Total	159	100	52	100
Idea of types of CAM used locally				
Herbalist/Spiritualists	75	47.2	24	46.2
Diviners/Faith healers	15	9.4	4	7.7
Others	2	1.3	1	1.9
None	67	42.1	23	44.2
Total	159	100	52	100
Lifetime CAM use				
Yes	103	64.8	28	53.8
No	56	35.2	24	46.2
Total	159	100	52	100
Lifetime CAM for mental illness				
Yes	103	64.8	28	53.8
No	56	35.2	24	46.2
Total	159	100	52	100
Mental health Improvement with CAM use				
Yes	51	32.1	22	42.3
No	71	44.7	14	26.9
Not sure	37	23.3	16	30.8
Total	159	100	52	100
Duration of CAM use				
1-12 Months	44	27.7	9	17.3
1-5 Years	55	34.6	19	36.5
6-10 Years	5	3.1	0	0.0
Never	55	34.6	24	46.2
Total	159	100	52	100
Doctor informed on CAM use				
Yes	40	25.2	24	46.2
No	119	74.8	28	53.8
Total	159	100	52	100
Side effects with CAM use				
Yes	11	6.9	2	3.8
No	53	33.3	23	44.2
Not Sure	95	59.7	27	51.9
Total	159	100	52	100
Preferred for Mental illness				
CAM	3	1.9	0	0.0
Hospital	127	79.9	33	63.5
Both	29	18.2	19	36.5
Total	159	100	52	100
Doctor advice to stop CAM				
Yes	44	27.7	7	13.5
No	115	72.3	45	86.5
Total	159	100	52	100
Overall CAM expenditure				
1,000-5,000	49	30.8	16	30.8
5,000-10,000	35	22.0	11	21.2
>10,000	17	10.7	7	13.5
None	58	36.5	18	34.6
Total	159	100	52	100
Concurrent CAM and hospital medicines use				
Yes	51	32.1	18	34.6
No	108	67.9	34	65.4
Total	159	100	52	100

Table 3: Continued

	UDUTH		FNPH	
	Frequency	Percentage	Frequency	Percentage
CAM used in past six months				
Yes	48	30.2	17	32.7
No	111	69.8	35	67.3
Total	159	100	52	100
Concurrent CAM and hospital medicines use be allowed				
Yes	64	40.3	18	34.6
No	95	59.7	34	65.4
Total	159	100	52	100
TYPES of CAM ever used				
Drinks/prayers	80	50.3	22	42.3
Powders	3	1.9	2	3.8
Ointments	8	5.0	3	5.8
Others	12	7.5	1	1.9
None	56	35.2	24	46.2
Total	159	100	52	100
Recommend CAM for someone with mental illness				
Yes	66	41.5%	17	32.7
No	93	58.5	35	67.3
Total	159	100	52	100
Preference				
CAM	12	7.5	2	3.8
Hospital	117	73.6	36	69.2
Both	30	18.9	14	26.9
Total	159	100	52	100

N = 211, UDUTH: Usmanu Danfodiyo University Teaching Hospital and FNPH: Sokoto and Federal Neuropsychiatric Hospital

UDUTH and FNPH. The study population demonstrated an average degree of knowledge on CAM evidenced by the demonstration of knowledge of CAM used locally citing examples. Lifetime CAM use and for psychiatric illnesses was higher while only about a third are current CAM users and use CAM concurrently with Hospital (orthodox) medications among the respondents in both facilities. More of the study population from UDUTH reported no improvement in their conditions with CAM use while FNPH admitted otherwise. The duration of CAM use among respondents varies as shown with a higher percentage of respondents not informing their physician that they use CAM. Very few respondents across board reported side effects with CAM use and believed CAM is better for mental disorders but majority have never been advised to by their physician to stop CAM use. Expenditures ever on CAM among respondents varies and suggested that concomitant use of CAM and Hospital medications be allowed by doctors despite the fact that they seldom recommend CAM use for other psychiatric cases. Herbal drinks and prayers are the most frequently used CAM among the study population.

DISCUSSION

The result of this study showed that lifetime CAM use and for psychiatric illnesses was high with about one third of

respondents being current CAM users. This is similar to a study among diabetic¹¹ and lung cancer¹² patients in Beirut Lebanon, cancer patients in northwest¹³, southwest¹⁴ and southeast¹⁵ Nigeria, also among people with anxiety/depression in the US¹⁶ and Troms Norway¹⁷ which reported a lower prevalence. However the previous studies on the prevalence of CAM used for mental disorders reported that 26% of patients suffering from a mental illness visited a traditional healer prior to presenting themselves to a mental health services¹⁸, a sizeable portion of the respondents report use of CAM to address emotional and mental problems¹⁹, 45% of adults who reported seeing a medical doctor in the past year had also used CAM therapy²⁰, also previous studies^{10,21} which reported 80 and 60-90%, respectively, with a study from Jamaica²² which reported a prevalence of concomitant herb-drug use in this population of home users as 26.7%.

Reports from this study revealed that about a third of the respondents are current CAM users and use CAM concurrently with Hospital medications with a higher percentage of respondents not informing their physician that they use CAM and reported no improvement in their conditions with CAM use and that herbal drinks and prayers are the most frequently used CAM among the study population. This is contrary to findings in a study of CAM use among cancer patients in south-western Nigeria which reported 64% current CAM users with about 60% of respondents discussing their CAM use with the attending physician and 65% are satisfied with CAM treatment, where as vegetables and supplements were the most frequently used CAM¹⁴, but similar to the finding in a study of CAM use in cancer patients in north-western and south eastern Nigeria which reported prayer and herbal therapy as the most common CAM methods with majority of the CAM users not deriving any benefit from CAM use and physicians are unaware of the CAM use in most case^{15,23}, which highlight in previous report²⁴, where it was reported that patients reported a wide range of CAM use, including prayer/spiritual healing (54%). Very few respondents across board reported side effects with CAM use and believed CAM is better for mental disorders this is in contrast to findings in previous studies which reported various unwanted effects^{14,15}. Findings in this study opined that majority have never been advised by their physician to stop CAM use and suggested that concomitant use of CAM and Hospital medication be allowed by doctors despite the fact that they seldom recommend CAM use for other psychiatric cases, similar to findings in previous studies where most respondents will not recommend CAM use but will use the two together for synergy¹⁵.

More of the study population were within the age group of 21-40 years with more males than females, with more male

and within this age bracket associated with the use of CAM for their condition. Majority of the respondents in UDUTH are married, which is partly similar to a study in Lebanon which reported majority of the sample population being males and predominantly married¹². Over one half of the study population either earns less than 10,000 NGN per month or nothing at all and admits that their monthly income affects their ability to pay Hospital medications and hence the necessity to seek for alternative. More of the respondents with duration from onset of psychiatric condition between 1-5 years and age at onset of 21-40 years were more likely to use CAM for their condition. Significant proportions of the study population are satisfied with Hospital medicine use and admit to improvement in their condition with use of Hospital medicines but admitted that the monthly expenditure on Hospital medications is part of the consideration that warrants CAM use.

CONCLUSION

The prevalence of CAM use among psychiatric patients in this study was relatively high. Herbal drinks and prayers were found to be the most commonly used type of CAM. Age, gender, disease duration and cost have been identified as some of the socio-demographic determinants influencing the use of CAM in the study population. Hence the need for psychiatrists to pay more attention to CAM use and related factors among their psychiatric patients as a factor that could affect patient management and outcome.

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