

AWARENESS AND UTILIZATION OF COMPLEMENTARY AND ALTERNATIVE (CAM) THERAPIES IN MANAGING MENTALLY ILL PATIENTS AT DORAYI PSYCHIATRIC REHABILITATION CENTER, KANO, NIGERIA.

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ABSTRACT

The use of Complementary and Alternative Medicine (CAM) is growing among people in both developed and developing countries, including Nigeria, this study aims to explore the utilization of complementary and alternative therapy among mentally ill patients diagnosed at Dorayi Psychiatric Rehabilitation Center, Kano. The study's objectives are to determine what factors influence use, which CAM modalities are most frequently used, how CAM practices could be integrated with conventional mental health treatments, and how effective different CAM interventions are at managing symptoms related to various mental health conditions. This research used an explanatory mixed method design; 150 mentally ill patients at the Dorayi Psychiatric Rehabilitation Center in Kano were included in the quantitative study, and key informants, including psychiatrists and psychiatric nurses who treat mentally ill patients, were interviewed for the qualitative study. The findings of the study showed that 34.7% of the respondents are young adults and 56% have no formal education. The study further revealed that awareness of CAM therapies used by mentally ill patients at Dorayi Psychiatric Rehabilitation Center is poor since only 10% of the respondents were aware of it and utilization of CAM therapies was high as 87% of the respondents reported using some forms of CAM therapies. The study concludes that cultural and religious variables are the primary determinants of the high prevalence of CAM therapy utilization in the management of mentally ill patients. Herbal medication and prayer therapy—more especially, reciting and consuming the Qur'an (in the form of rubutu)—are the most often utilized among these treatments. To improve treatment outcomes, however, prayer therapy and recreational therapy must be incorporated into conventional mental health care to address the spiritual and emotional needs of mentally ill patients. The development of established guidelines, evidence-based research, partnerships with CAM practitioners, and training programs for psychiatric staff are the main goals of the strategies for incorporating complementary and alternative medicine into conventional. Therefore, the study recommends that during rehabilitation sessions, mentally ill patients and their relatives should receive health education about the various CAM therapy alternatives available for managing their illness. This is with a view of increasing the level of awareness and enhancing treatment outcomes.

Keywords: Complementary and alternative medicine (CAM), mentally ill patients, Nigeria

1. INTRODUCTION

The use of complementary and alternative medicine (CAM) therapies is widespread among those who suffer from mental health issues. The CAM use prevalence varies between 30 and 75% worldwide. Higher rates of CAM use have been seen in the North Western (84%) and South Western (90%) regions of Nigeria, according to certain other studies [1]. The term "continuous and alternative medicine" (CAM) has been used to refer to a variety of indigenous medical practices in Africa, including traditional bone setting, the use of imported CAM materials and

procedures, such as chiropractic and acupuncture. Nigerians are also familiar with and frequently utilize traditional herbal medicines. Most CAM users utilize it to supplement conventional care to avoid illness. They also value other aspects of complementary and alternative medicine (CAM) that are not common in conventional medicine, such as comparatively reduced costs, patient-centered care, and cultural sensitivity [2]. Mental illness has been dubbed the pandemic of the twenty-first century and the next great public health problem because it causes great suffering for people and significant expenditures for society [3]. Despite mental illness has been estimated to cause one-third of the disability of adults worldwide [4],

one-third of the disability of adults worldwide [4], in Nigeria, 1 in 4 that is about 50 million people are suffering from some sort of mental illness [5]. The Kano-Nigerian population has a high prevalence rate of mental illness, particularly among younger people [6]. Based on research done by Ng et al., [7], different CAM therapies purportedly help treat psychiatric illness or relieve psychiatric symptoms. Among these are the most popular herbal remedies, such as S-adenosyl-L-methionine [SAME], St. John's Wort (*Hypericum perforatum*), vitamins, minerals, or dietary supplements; physical or mind-body therapies, such as exercise, acupuncture, and light therapy; mindfulness psychotherapies, such as mindfulness-based cognitive behavioral therapy [MCBT]; and other practices like meditation and prayer. The majority of people with mental health issues use complementary and alternative medicine, according to research from the USA, Australia, and Norway. In addition, it is discovered that the usage is more prevalent in individuals receiving traditional medication and escalates with the severity of mental disease [8]. As seen in other parts of the world, CAM therapy is becoming more and more popular in Nigeria. This is due, among other things, to the serious side effects of conventional management, which include increased cost, decreased effectiveness, difficulty accessing controlled substances, medication tolerance, and dependence. The study conducted in Nigeria, particularly in Sokoto State, focused on the prevalence and factors influencing the use of complementary and alternative medicine (CAM) among mentally ill patients [9]. However, there is limited information available on the types of CAM therapies most utilized among mentally ill patients and their frequency of use. Additionally, there is insufficient data on the effectiveness of CAM interventions in reducing or alleviating the symptoms associated with different mental health conditions. Therefore, conducting a study on this will fill the knowledge gap and will provide evidence-based CAM interventions that could complement conventional treatments.

II. MATERIAL AND METHODS

A mixed-methods explanatory design was used in the study. A quantitative descriptive cross-sectional survey with patients who have been diagnosed with mental illness is part of the design. Subsequently, Qualitative interviews were conducted with key informants, comprising psychiatric doctors and nurses

who treat patients with mental illnesses at the Dorayi Psychiatric Rehabilitation Center in Kano. Ethical approval was given by the Ministry of Health Kano's Research Ethics Committee, with reference number SHREC/2024/4669.

Target Population

The target population for the quantitative survey is patients diagnosed with mental illness whose cognition is not impaired at Dorayi Psychiatric Rehabilitation Center, Kano. Qualitative interview was conducted with healthcare providers (psychiatric nurses and doctors) attending to mentally ill patients at Dorayi Psychiatric Rehabilitation Center, Kano.

Sample size and sampling technique

A sample of 150 participants was derived using Cochran formula $(n) = \frac{Z^2 p(1-p)}{d^2}$ for the quantitative data with a point prevalence rate of mental illness in the adult population of about 10% according to a study done in Karfi village, Kano. For the qualitative survey, four interviews were conducted (two psychiatric nurses and two psychiatric doctors) at Dorayi Psychiatric Rehabilitation Center, Kano.

A systematic random sampling technique was used to recruit consenting patients as they arrived at the outpatient clinic. The sampling interval was determined using the expected patient turnover based on previous records. A random number table was used to randomly select the first patient. Subsequent patients were obtained by adding that day's sampling interval to the previous patient's serial number. However, if the selected respondent is not eligible, he/she will be excluded and the next eligible respondent will be recruited. This process was done daily for a period of two weeks when the required sample size was obtained.

Inclusion Criteria

Patients who are 18 years of age or older, diagnosed with mental illness at least two years before the trial, and who are currently getting therapy whose cognition is not impaired and give voluntary informed consent to participate in the study both male and female at Dorayi Psychiatric Rehabilitation Center, Kano.

Exclusion Criteria

Mentally ill patients age below 18 years, diagnosed less than 2 years prior to the study, not receiving treatment, whose cognition is impaired and cannot give voluntary informed consent or refuse to participate in the study.

Study instrument

For the quantitative survey, an interviewer-administered questionnaire (IAQ) was used. The IAQ comprises five (5) sections which include: biodata, factors influencing CAM use, CAM modalities most commonly utilized, integration of CAM therapies alongside conventional treatment of mental illness, and effectiveness of CAM Therapies in managing mental illness.

A structured interview guide was used to collect data from key informants i.e. the psychiatric nurses and doctors. The interview guide encompasses questions targeted at eliciting information on the utilization of CAM therapies by mentally ill patients at Dorayi psychiatric rehabilitation center. A tape recorder was used to record the interview session, which lasted between 30 to 45 minutes. Data was collected within a period of two weeks.

III.VALIDITY AND RELIABILITY OF THE INSTRUMENT

An evaluation of the instrument by 3 experts in the area of the study gave a face and content validity of 80%. Test and retest reliability was conducted using 10% of the total sample size. The internal consistency reliability test was compared and calculated using the Pearson correlation coefficient. The result obtained was 0.7, which indicates excellent test-retest reliability and, thus stronger consistency of the instrument.

Data analysis

Version 21 of the statistical package for social science (SPSS) was used to analyze the data gathered for this study. Quantitative data were presented using Descriptive statistics, simple frequency tables and percentages. The mean and standard deviation for age of the respondents were computed Utilization of CAM therapies by mentally ill patients was presented using a pie chart. Qualitative data was analyzed using Content analysis and presented in a triangulated format with the quantitative data.

IV.RESULTS

A total of 150 questionnaires were administered, completed, and analyzed. Findings from the study revealed that 52 (34.7%) of the respondents are between the ages of 18-30 years with a mean age of 28.30 ± 4.09 years. The table further revealed that 82(54.7%) of the respondents are females, 97 (64.7%) of the respondents are married, More than half i.e. 84(56%) of the respondents have no formal education and about 53(35.3%) of the respondents are self-employed.

The table further indicated that the vast majority 48 (32%) of respondents are suffering from substance abuse disorder and 59(39.3%) of the respondents were diagnosed with mental illness more than 10 years ago.

Table 1: Distribution of respondents by Bio-demographic data N=150

Variable	Frequency	Percentage (%)
Age		
18-30	52	34.7
31-40	43	28.7
41-50	16	10.6
50 and above	39	26
Mean \pm Standard deviation = 28.30 ± 4.09		
Gender		
Male	68	45.3
Female	82	54.7
Marital status		
Single	35	23.3
Married	97	64.7
Divorced	08	5.3
Widowed	10	6.7
Educational qualification		
No formal education	84	56
Primary school	10	6.7
Secondary school	16	10.6
Tertiary school education	40	26.7
Employment status		
Employed	17	11.3

House wife	32	31.3
Self-employed	53	35.3
Unemployed	30	20
Retires	3	2
Student	15	10
Duration of mental illness		
Less than 2years		
2-5years	43	28.6
5-10years	48	32
More than 10years	59	39.3
Diagnosis of mental illness		
Substance abuse disorder	48	32
Depression	32	21.3
Mania	3	2
Schizophrenia	4	2.7
Postpartum psychosis	12	8
Epilepsy	14	9.3
Bipolar	7	4.7
Anxiety disorder	8	5.3
PTSD	6	4
Others	16	10.7
Total	150	100

Figure 1 shows that about 135 (90.0%) of respondents were unaware of CAM therapies used by mentally ill patients. Only a minority 15(10.0%) of the respondents were aware of CAM therapies used in managing mentally ill patients.

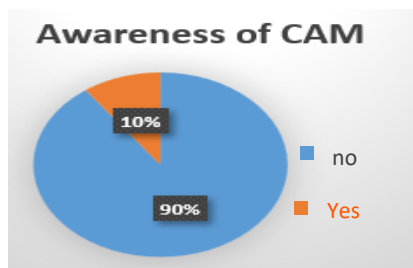


Figure 1: Awareness of CAM

Figure 2 shows that about 130 (87.0%) of respondents utilized CAM therapies in managing their mental illness. Only a minority 20(13.0%) of the respondents do not utilize CAM in managing their mental illness.

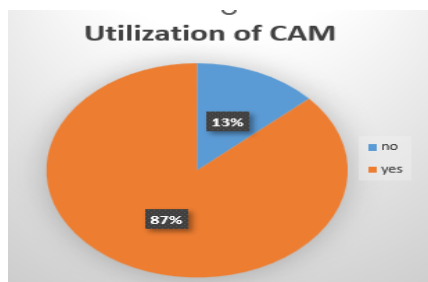


Figure 2: Utilization of CAM

In line with the quantitative study, findings from the qualitative study revealed that all the key informants stated that the level of awareness of the utilization of CAM therapies in managing mentally ill patients is low. However, utilization is high, and specific CAM therapies used are herbal medicine, aromatherapy, recreational therapy, and prayer therapy with frequency of use on daily basis. Excerpt of responses is stated below;

"The level of awareness on CAM therapies in managing mental illness is really poor; the concept is not well known and understood in the field of psychiatric by both we the care-giver and the patients. However, patients on their own do utilized herbal medicine, prayer therapy, music therapy in form of Quran recitation. Yet most patients that utilized report using it on daily basis. (Key informant interview with psychiatrist).

Table 2 revealed that 47(31.3%) of the respondents stated that cultural or religious factors prompted them to use CAM therapies. other factors reported are seeking a holistic approach to treatment accounting for 22(14.7%), recommendations from friends and families accounting for 20(13.3%) of the respondents, desire for fewer side effects accounting for 18(12%) and 6(4%) of the respondents reported lack of access to conventional treatment as a factor. Moreover, 37(24.7%) of the respondents reported barriers that hinder them to use CAM therapies in managing their mental illness, among the barriers are Lack of information about CAM therapies, Skepticism about effectiveness and Fear of adverse effects.

Table 2: Factors influencing CAM use

Factors influencing use of CAM by mentally ill patient	Frequency	Percentage (%)
Cultural or religious factor	47	31.3
Desire for fewer side effect	18	12
Lack of access to conventional	6	4
Recommendations from friends and families	20	13.3
Seeking holistic approach	22	14.7
Barriers	37	24.7

The key informant interviews also revealed that cultural/religious factors, peer influence, and misconceptions about the disease causation are mostly what prompted the mentally ill patients to seek CAM therapies.

“There are numerous factors that influenced the mentally ill patients to use CAM therapies, in the form of herbal medicine or prayer therapy, the main factor is cultural or religious belief, recommendations from friends and families, seeking a more holistic approach to treatment as some of the conventional mental treatments are taking for lifelong” (Key informant interview with psychiatrist).

Table 3: indicated that an overwhelming majority 109(72.7%) of the respondents reported that yes, to some extent CAM therapies should be integrated into conventional mental treatment, 82(54.7%) of the respondents stated that prayer therapy and recreational therapy are the specific CAM therapies to be integrated in to conventional treatment.

The vast majority of the respondents stated that the potential benefit of integrating CAM therapies into conventional is to address the spiritual and emotional needs of mentally ill patients accounting for 97(64.7%), and 84(56%) of the respondents reported yes, to some extent they notice improvement when CAM therapies is combined with the conventional treatment.

Table 3: CAM integration in to conventional

Variable	Frequency	Percentage (%)
CAM should be integrated in to conventional	-	-
Yes, I strongly believed	21	14
Yes, to some extent	109	72.7
I’m unsure	11	7.3
No, I don’t think	09	6
Specific CAM therapies to be integrated		
Prayer therapy only	68	45.3
Prayer therapy and recreational therapy	82	54.7
Potential benefit of integrating CAM therapies in to conventional		
Addressing spiritual and emotional need	97	64.7
Enhance treatment outcomes	35	23.3
Reduced side effect	08	5.3
More holistic approach to treatment	10	6.7
Improvement notice when CAM is combined with conventional		
Yes, I experience significant improvement	10	6.7
Yes, I noticed some improvement	84	56
No, I didn’t notice any change	40	26.7
I haven’t tried combining	16	10.6
Total	150	100

The qualitative survey revealed that strategies to effectively integrate CAM alongside conventional therapies include: Training programs for psychiatric workers, Collaboration with CAM practitioners, developing standardized guidelines and evidence-based research are the strategies revealed by the key informant on integrating CAM therapies alongside conventional mental treatment.

Table 4 indicated that 78 (52%) of the respondents reported that CAM therapies are somewhat effective in managing their mental illness while 72(48%) report not effective. 78(52%) respondents also stated that yes, they experience specific improvement in their mental health as a result of using CAM therapies while 72(48%) reported No. The vast majority of the respondent 82(54.7%) revealed that they will continue and recommend others to use CAM therapies in managing their mental illness

Table 4: Effectiveness of CAM

Variable	Frequency	Percentage (%)
Effectiveness of CAM therapies		
Very effective	-	-
somewhat effective	78	52
Not effective	72	48
Specific improvement		
Yes	78	52
No	72	48
Not sure	-	-
Continue and recommending CAM to others		
Yes	82	54.7
No	68	45.3
Not sure	-	-
Total	150	100

V.DISCUSSION

This study is unique to similar studies due to the use of a mixed research method and triangulation Findings from the study revealed that a reasonable proportion of the respondents are young adults and females, which may be linked to their risk-taking behavior, inadequate living conditions, and unhealthy family dynamics. Findings are similar to that of studies conducted by Nwoke et al., [10]. Therefore, there is a need to tailor more attention towards adolescent and young adult mental health, both preventive and promotive measures, since they are the majority.

The findings further indicated that the majority of the respondents were married and a reasonable proportion of the respondents have no formal education, which is consistent with a similar study in Ebonyi [10]. In addition, a significant proportion of the respondents were self-employed, followed by full-time housewives and unemployed which is contradictory with that revealed by Nwoke et al., [10]. Substance abuse disorder and depression are the diagnoses of more than half of the respondents and were diagnosed at least

years back and above. This is consistent with a study conducted in Abakaliki [11]. Therefore, there is a need to identify risk factors associated with the condition and prompt measures should be put in place to curtail the prevalence.

Awareness of Complementary and alternative therapy used in managing mentally ill patients at Dorayi Psychiatric Rehabilitation Center is poor since only a minority of the respondents were aware of it. on the other hand, utilization is high, and specific CAM therapies utilized as reported by the respondents are herbal therapy, aromatherapy, and prayer therapy in the form of qur'anic recitation and consumption(rubutu) which more than half revealed to utilize them on daily basis. These findings are in line with the study conducted [9,10,12] but awareness of CAM was not specifically reported.

A vast majority of the respondents reported that cultural and religious factors are the main reasons that prompt them to seek CAM therapy. Other factors are recommendations from friends and family, desire for fewer side effects and seeking a holistic approach to

treatment, this is not consistent with a study conducted in Sokoto state which reported cost as a factor which found that the use of complementary and alternative medicine (CAM) was motivated by expectations of its benefits, dissatisfaction with conventional medicine, and perceptions of its safety [9]. Therefore, this indicates the need to respect the patients' cultural or religious beliefs in order to enhance treatment outcomes for mentally ill patients. The respondents who reported not using CAM stated that skepticism about its effectiveness and fear of adverse effects are among the reasons that hinder them from using CAM. This indicated a need for more experimental research on the effectiveness of the CAM therapies used.

There is a noticeable trend in the practice of conventional medicine toward the integration of complementary and alternative medicine (CAM) therapies. The majority of the respondents stated that to some extent CAM therapies can be integrated into convention, and specific CAM therapies to be integrated are recreational and prayer therapy in order to address spiritual and emotional needs which will yield some improvement in managing the mentally ill patients.

The key informant stated that strategies toward integrating CAM therapies alongside conventional mental treatment are: Training programs for psychiatric workers, Collaborations with CAM practitioners, developing standardized guidelines and evidence-based research are the strategies revealed by the key informant on integrating CAM therapies alongside conventional mental treatment. This finding is not consistent with a study conducted in Sokoto state by Olayiwola et al [9] which recommends the need for a psychiatrist to pay more attention to CAM use among their psychiatrist patients as a factor that could affect patient management and outcome. Because the study paid emphasis only to the use of herbal medicine as a form of CAM therapy neglecting other forms of CAM therapies.

The vast majority of the respondent reported that CAM therapies are somewhat effective as they have noticed some improvement in their mental health, and they recommend and continue to use CAM therapies in managing their mental health condition. This is consistent with a study conducted by Barman et al.[13] which concluded that Certain CAM interventions might be effective as monotherapies and/or as adjunctive treatments for psychiatric conditions. They might, however, also pose a risk to one's safety, have contraindications, or interact with other medications. Doctors and other mental health care providers must learn about the indications, safety, and dosage of complementary and alternative medicine (CAM) as well as how often their patients use it.

influencing the use of CAM. The study, however, differs from the one by Tangkiatkumjai et al. [14].

VI.CONCLUSION

The study concludes that cultural and religious variables are the primary determinants of the high prevalence of CAM therapy utilization in the management of mentally ill patients. The most widely used of these treatments are herbal remedies and prayer therapy, particularly through Qur'anic recitation and ingestion (in the form of rubutu). To improve treatment outcomes, however, prayer therapy and recreational therapy must be incorporated into conventional mental health care to address the spiritual and emotional needs of mentally ill patients. The development of established guidelines, evidence-based research, partnerships with CAM practitioners, and training programs for psychiatric staff are the main goals of the strategies for incorporating complementary and alternative medicine (CAM) therapies into conventional mental health therapy.

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