

Knowledge, Attitude, and Practices of people in Bosomtwe district towards traditional medicine use and their early healthcare-seeking behavior in Ashanti region, Ghana

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World Journal of Advanced Research and Reviews, 2022, 15(01), 128–137

Publication history: Received on 28 May 2022; revised on 30 June 2022; accepted on 02 July 2022

Article DOI: <https://doi.org/10.30574/wjarr.2022.15.1.0667>

Abstract

Introduction: Traditional medicine has been practiced for many decades and is found in most countries worldwide. The demand for its services is increasing. In Africa, up to 80% of the population uses traditional medicine one way or the other.

Method: A cross-sectional study was conducted in Bosomtwe district of Ashanti Region, Ghana. The study consisted of 150 respondents who were conveniently sampled. The eligibility criteria were participants aged 18 years and above who lived in Bosomtwe district. The respondents were interviewed using a questionnaire, and data were collected to assess the people's knowledge, attitude, and practice toward traditional medicine use and their early healthcare-seeking behavior. In addition, chi-squared analysis was used to determine the association between age, gender, educational status, and traditional medicine usage.

Result: All the respondents interviewed had heard about traditional medicine, and 58% of them knew the composition of traditional medicine. Most information about traditional medicine in the community was through the media and relatives. 76% of the respondents sought traditional medicine as their preferred primary healthcare option. In comparison, up to 78.7% of the respondents use or have used traditional medicine before, demonstrating higher patronage of traditional medicine use in the communities. The most typical route of administration of traditional medicine among the respondents was via the oral route (44.7%). 46.6% of the respondents use traditional medicine before seeking early medical care and mainly delay at home for one month. 19.5% of the respondents use traditional medicine without medical treatment, and 16.1% use traditional medicine along with hospital treatment. 17.8% use traditional medicine only when medical treatment fails. There was no significant association between age, gender, educational status, and traditional medicine usage.

Conclusion: Traditional medicine plays a vital role in the health practices of individuals in the Bosomtwe district and, as such, needs to be educated on the adverse effects, drug-to-drug interactions, and the need to seek hospital treatment early before the illnesses progress to chronicity.

Keywords: Traditional Medicine; Modern Treatment; Healthcare; Population; Patronage

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1. Introduction

It is estimated that a large proportion of the population living in developing countries rely on traditional medicine to meet their healthcare needs [1]. This was the only available treatment method in this part of the world before modern medicine was introduced. Even after the advent of modern medicine, traditional medicine usage continues to play a significant role in the health care system. In most parts of the world, traditional medicine is either the central component of health care delivery or serves as an addition to it [2]. Traditional medicine is predominantly used in the prevention and treatment of considerable range of ailments spanning from mental health disorders, non-communicable diseases, improving quality of life for persons living with chronic diseases and the ageing population [3]. Traditional medicine is found in almost all countries, and its demand is rising in healthcare. As a result, it has been integrated into the health care system of many nations. However, the primary concern about traditional medicine is the safety of the medication, the labeling, information about the composition and dosage, indications, and contraindications [4, 5].

In Africa, up to 80% of the population use traditional medicine as a form of their primary healthcare [6]. There has been a global upswing in the last decade in traditional medicine use. Various reasons have been reported for this increase, including affordability, availability, and effectiveness of traditional medicine than modern treatment [7, 8]. Recent studies show that 70% of the population of Ghana resides in areas with poor access to modern healthcare [9]. This is evident in almost 85% of the Ghanaian population living in the rural areas who seek the use of traditional medicine for their health needs and 45-65% of people in the urban setting [10]. The unavailability of healthcare facilities and providers has contributed significantly to traditional medicine use becoming vital in the Ghanaian healthcare system [9].

The knowledge about traditional medicine remains questionable as most people have limited information about the composition and adverse effects. A study conducted in Nigeria showed that most users of traditional medicine believed there were no adverse effects with traditional medicine use [11]. However, it is noted that the most severe adverse effect of traditional medicine use includes hepatic and renal failure [12,13].

The patronage of traditional medicine is seen to increase worldwide, with 40% of all health care provided in China being purely traditional medicine [14]. A study done in the United States showed that 12.8% of adults use traditional supplements, with the majority being women [15]. The current upsurge in the patronage is due to the notion that traditional medicines are more productive and effective than modern treatment, the belief that natural plants are superior to manufactured products, and the idea that traditional medications might prove successful in treating conditions where conventional drugs have been ineffective, and the adverse effects associated with modern treatment [16]. Age, sex, and educational level are other factors identified with increasing traditional medicine usage [17]. Hence, this study aims to

- Assess the knowledge of the people of Bosomtwe district about traditional medicine,
- Assess the preferred primary method of treatment, and
- Assess how the use of traditional medicine impacts their healthcare-seeking behavior.

2. Methodology

2.1. Study design and setting

A cross-sectional study design was used to conduct this study in Bosomtwe district, Ashanti Region. Bosomtwe district is one of the forty-three districts in Ashanti Region of Ghana, and it is found in the central part. Kuntanase, the district capital, is about 30 km from Kumasi, Ashanti region's capital. There are three sub-districts and 67 communities, with a total population estimated to be 104 478 in the district. The district is bordered by Ejisu-Juaben district, Kumasi Metropolis, Bosome-Freho district, Atwima Kwanwoma District, and Bekwai Municipality. In addition, there are twenty-six health facilities to support and improve the inhabitants' health standards.

2.2. Sampling procedure

A convenient sampling method was used to obtain the study's total population. The sample size for the study was 150, which included individuals from the district. Communities in the district were chosen conveniently, including Aputuogya, Jachie, Pramso, Beposo, Sawua, and Kuntanase.

2.3. Data collection tool

A questionnaire was administered for data collection. The questionnaire was structured to have both open-ended and closed-ended questions to obtain information from the participants. In addition, a pre-test was performed by administering questionnaires to 10 randomly selected people in the Asokwa district to assess the strength and weaknesses of the questionnaire, and corrections were made before they were finally sent for the actual study.

2.4. Data Collection Procedure

The study was conducted from August 1, 2015, to August 28, 2015, using an interviewer-administered questionnaire. The questionnaire was written in English and translated into the local dialect for those who were uneducated or had little understanding of English.

2.5. Data Processing and Analysis

The data was analyzed using SPSS 20.0. Incorrect data were double-checked with the raw data from the questionnaire and corrected. Data quality was validated using double entry. Chi-squared analysis was done to assess the association between age, gender, educational status, and traditional medicine usage. Questionnaires and information gathered were stored in a safe and secured place on the laptop, and backup was done.

2.6. Eligibility Criteria

The study participants were those aged 18 years and above who lived in the Bosomtwe district. Participants' voluntary participation and consent contributed to being eligible for the study. Therefore, permission was sought from each participant before the questionnaire was administered.

2.7. Ethical Consideration

Before carrying out the study, clearance was sought from the Committee on Human Research, Publications, and Ethics, KNUST. The study proposal, data collection tools, informed consent forms, and other vital documents were submitted to the committee for review. Information on the requirement of the study was explained to each participant before the start of the study. Confidentiality and privacy were ensured throughout the research, and participants' names were not included in the questionnaire.

3. Results

3.1. Socio-demographic and Economic characteristics

Table 1 Socio-demographic characteristics of the participants

Study Participants	N = 150
AGE	
18-29	46 (30.6)
30-39	29 (19.3)
40-49	22 (14.7)
50-59	26 (17.3)
60-69	10 (6.7)
70-79	10 (6.7)
80-89	4 (2.7)
90-99	3 (2.0)
SEX	
Male	49 (32.7)
Female	101 (67.3)

RELIGION	
Christian	127 (84.7)
Muslim	17 (11.3)
Traditional	5 (3.3)
Other	1 (0.7)
Marital status	
Single	42 (28.0)
Married	77 (51.3)
Divorced	10 (6.7)
Widowed	21 (14.0)
Educational level	
Not educated	14 (9.3)
Primary	19 (12.7)
JHS	60 (40.0)
SHS	25 (16.7)
Tertiary	32 (21.3)
Occupation	
Unemployed	31 (20.7)
Farmer	30 (20.0)
Civil servant	24 (16.0)
Student	8 (5.3)
Other	57(38.0)

Table 1 shows the demographic characteristics of the study. The total study participants were 150, with ages ranging from 18 – 99 years. 30.7% of the participants were within the age range of 18-29 years. This was followed by participant's 30-39years. Majority of the participants (67.3%) were females. 84.7% of the participants were Christians, followed by 11.3% being Muslims. Most participants (40.0%) had attained Junior high school level of education, followed by 21.3% who had reached tertiary level of education. 51.3% of the participants were married, 28.0% were single, and 6.7% were divorced. 38.0% of the participants had other forms of occupation, including being self-employed, with 20.7% of the participants not employed.

3.2. Knowledge about traditional medicine

Table 2 gives responses concerning the knowledge the participants have about traditional medicine. All the participants (100%) had heard about traditional medicine, with 46.7% of the participants getting their source of information through the media. This was followed by 24.0% of the participants getting their information from their relatives. In addition, 58% of the participants knew the composition of the traditional medicine, with 26% not knowing and 16% unsure about the composition.

3.3. Attitude of the respondent towards traditional medicine

Table 3 shows that most participants (49.3%) think traditional medicine is effective, followed by 32.7% who think it's readily available, 12.7% think it's cheap and 5.3% think it's better than medical treatment.

Table 2 Knowledge about traditional medicine

Have you heard about traditional medicine	
Yes	150 (100%)
No	0 (0%)
Source of information about traditional medicine	
Relatives	36 (24.0)
Friends	34 (22.6)
Health worker	10 (6.7)
Media	70 (46.7)
Knowledge of the composition of traditional medicine	
Yes	87 (58.0)
No	39 (26.0)
Not Sure	24 (16.0)

Table 3 Thought about traditional medicine use

Variable	N = 150
Effective	74 (49.3)
Readily available	49 (32.7)
cheap	19 (12.7)
Better than medical treatment	8 (5.3)

3.4. Preferred Primary treatment

Table 4 Preferred primary treatment

Variable	N = 150
Traditional medicine	114 (76.0)
Hospital treatment	36 (24.0)

Table 4 shows that 76.0% of the participants' preferred primary treatment for their ill-health was traditional medicine, and 24.0% liked hospital treatment as their primary treatment option or services provided by the health care setting.

3.5. Usage of traditional medicine

Table 5 shows that 78.7% of the participants have used traditional medicine in their lifetime, and 21.3% have never used it. 39.8% of the participants use traditional medicine when ill, followed by 32.2% who use it daily. 22.0% use traditional medicine weekly. Regarding the route of administration, 56.8% use it orally, followed by 26.3% who use it either orally, topically, or via enema. 0.8% of the participants' administration route depends on the illness. Most diseases treated with traditional medicine (46.6%) include waist pains, menstrual irregularities, male sexual enhancement, hemorrhoids, typhoid, hernia, hypertension, and gastric ulcer. 33.1% use it for treating malaria, followed by 16.1% who use it for treating fever of any origin.

51.7% of the participants stated their illness is cured by traditional medicine, and 39.8% said they usually get partial relief after using it. 46.6% use traditional medicine before seeking medical treatment. 19.5% use traditional medicine only, and 17.8% use traditional medicine when medical treatment fails.

Table 5 Usage of traditional medicine

Have you used traditional medicine before	
Yes	118 (78.7)
No	32 (21.3)
Variable	N = 118
How often do you use traditional medicine	
Daily	38 (32.2)
Weekly	26 (22.0)
Monthly	7 (6.0)
When ill	47 (39.8)
Route of administration of traditional medicine	
Oral	67 (56.8)
topical	6 (5.1)
enema	13 (11.0)
All the above	31 (26.3)
It depends on the illness	1 (0.8)
Illness treated with traditional medicine	
Malaria	39 (33.1)
Fever	19 (16.1)
Diarrhea	2 (1.7)
Vomiting	3 (2.5)
Other	55 (46.6)
Does traditional medicine cure the illness	
Yes	61 (51.7)
No	10 (8.5)
Partial relief	47 (39.8)
How do you use the traditional medicine	
Along with hospital treatment	19 (16.1)
Traditional medicine only	23 (19.5)
When medical treatment fails	21 (17.8)
Before seeking medical treatment	55 (46.6)
Duration before seeking medical care	
One week	26 (22.0)
Less than one month	20 (17.0)
One month	41 (34.7)
2- 5 months	18 (15.3)
Six months	12 (10.2)
More than one year	1 (0.8)

34.7% of the participants use traditional medicine for their illness a month before seeking medical care, followed by 22.0% who use it a week before seeking medical care. 0.8% use traditional medicine more than one year before seeking medical care.

3.6. Association between Socio-demographic variables and usage of traditional medicine

Table 6 Association between socio-demographic variables and usage of traditional medicine

Usage of traditional medicine					
variable	Yes	No	Total	p-value	Chi-squared
Gender					
Male	40	9	49	0.537	0.3815
Female	78	23	101		
Total	118	32	150		
Age					
18-29	35	11	46	0.970	1.7931
30-39	24	5	29		
40-49	16	6	22		
50-59	22	4	26		
60-69	8	2	10		
70-79	8	2	10		
80-89	3	1	4		
90-99	2	1	3		
Total	118	32	150		
Educational Status					
Up to Junior High School level	76	17	93	0.244	1.3599
Senior High school to Tertiary level	42	15	57		
Total	118	32	150		

Table 6 shows no significant association between the participants' ages, gender, educational status and traditional medicine usage with p-values of 0.537, 0.970, and 0.244, respectively.

4. Discussion

The study reveals findings on the knowledge, attitude, and practice of people in Bosomtwe district towards traditional medicine use and their early healthcare-seeking behavior. The study sought to find out whether the people knew about traditional medicine and their thoughts about it with their preferred primary treatment method. There was inquisition into the preferred route of administration, the illness generally treated with traditional medicine, whether they get cured, the mode of usage, and the association between some socio-demographic characteristics and traditional medicine usage.

All the participants had heard about traditional medicine, and among these participants, 58% had an idea about the composition of the traditional medicine they use. The result above contrasts with a study by WHO which states that there is limited information about the composition of traditional medicine used for most illnesses [18]. In addition, 46.7% of the participants get their source of information about traditional medicine from the media. This agrees with a study conducted in Nigeria, which states that most information about traditional medicine is broadcasted through the media using the radio and television channels to reach their targeted population [19].

Most people attribute the high usage of traditional medicine to lack of adequate health facilities and health care providers in both developed and developing countries. However, this is not always the case as this is coupled with other factors, including effectiveness and the ready availability of traditional medicine within the countries [20]. Most participants (49.3%) stated that traditional medicine is effective, with 32.7% saying traditional medicine is readily available. In addition, 12.7% of the participants stated that traditional medicine is cheap, which influences their patronage. The result agrees with a study conducted in Ethiopia which concluded that the reason for using traditional medicine was its efficacy, affordability, and geographical accessibility compared to modern health care [21].

76% preferred traditional medicine as their primary treatment method, and 24% chose hospital treatment. This data agrees with a study that concluded that almost 70% of Ghanaians prefer traditional medicine for their immediate health care needs [22]. Some reasons for this preference include the high cost of modern healthcare, the wait time at the health facilities, poor client satisfaction, and the perceived adverse effects of modern medicine.

78.7% of the participants use traditional medicine or have at least used traditional medicine once in their lifetime. This agrees with a study that states that 80% of Africa's population uses traditional medicine [3]. 39.8% of the participants use traditional medicine when ill, and 32.2% use it daily. The result concurs with a study conducted among American adults, which stated that one-third of the participants use traditional medicine daily [23]. Most participants (46.6%) use traditional medicine before seeking medical treatment, with 34.7% delaying up to one month. The data is supported by a study which stated that management of diseases in many households begins at home outside of the healthcare facilities [24]. 19.5% use traditional medicine only, 17.8% use it when medical treatment fails, and 16.1% use it alongside hospital treatment. This agrees with a study conducted in Bangladesh, which concluded that most people use traditional medicine, and only after failure of this treatment do they visit the healthcare centers for modern treatment [25].

Females were seen to use traditional medicine more than the males, but the association between them was not statistically significant, with a p-value of 0.537. This agrees with a study that states no statistically significant association between gender and usage of traditional medicine [21]. Traditional medicine use was high among age range 18-29, followed by 30-39. There was no significant association between the age of the participants and the usage of traditional medicine. Participants with educational status from Junior high school level and below were seen to have high usage of traditional medicine compared to those with Senior high school level and Tertiary education level. There was no significant association between educational status and usage of traditional medicine, with a p-value of 0.244. The above information disagrees with a study that concluded that educational level substantially affects traditional medicine use [26].

5. Conclusion

Traditional medicine use continues to play a significant role in the healthcare setting of Ghana, where most people in rural areas resort to it for their primary health needs. The study showed that all the respondents in the Bosomtwe district had heard about traditional medicine, with 76% preferring traditional medicine to hospital treatment. Furthermore, 78.7% use traditional medicine, with 39.8% using it when ill. Most participants use traditional medicine because it's effective and readily available, with most participants very sure that their illnesses are cured after traditional medicine use.

46.6% use traditional medicine before seeking medical care, which normally occurs a month before they seek it. It is noted that most people who report late to the healthcare centers following prolonged use of traditional medicine either have worsening of their conditions, superimposed illnesses from drug-to-drug interactions and adverse effects from traditional medicine use, and some conditions progressing to chronicity. Therefore, the Ministry of Health and its agencies should advocate for and educate the public on drug-to-drug interaction and the adverse effects of traditional medicine. Furthermore, they should ensure traditional medications within the country go through the appropriate preparation standards and be certified by the Food and Drug Authority, which will enable enrolment of these medications as part of the medicines on the National Health Insurance Scheme medicine plan. The above measures will improve monitoring of traditional medicine use, safety, and effectiveness and make it readily available.

Compliance with ethical standards

Acknowledgments

We appreciate all participants who consented to this study and contributed significantly to providing in-depth knowledge on traditional medicine use and their early healthcare-seeking behavior in the Bosomtwe district, Ashanti Region- Ghana.

Disclosure of conflict of interest

The authors have no conflict of interest relevant to this article.

Statement of informed consent

The authors certify that informed consent was obtained from all the participants, and confidentiality was assured throughout the study. In addition, the participants were made aware their identities would remain anonymous throughout the study.

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