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## ASSESSMENT OF THE AWARENESS AND USAGE OF HERBAL MEDICINE IN IBADAN METROPOLIS, NIGERIA

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### ABSTRACT

*This study focuses on assessing the awareness and usage of herbal medicine in Ibadan Metropolis, Oyo state. Two stage sampling technique was used to randomly select 200 respondents Primary data needed for the study were collected through the administration of questionnaires .Descriptive statistics (such as frequency, table, and percentage) and inferential statistics (Pearson product moment correlation analysis) were used to analyze the data. The study revealed that 94% of residents in Ibadan metropolis have an understanding that herbal medicine is made from plant. Majority (51.5%) come to know of herbal medicine they are using/have used through family members. 75.5% of the respondents use herbal medicine for treating illness. The study revealed a high awareness and usage of herbal medicine among respondents. (Df= 198, N= 200, r= .593\*, P < 0.05). There was a significant relationship between awareness and the use of herbal medicine among respondents in Ibadan metropolis. It was recommended that healthcare providers should be conversant with the commonly used herbs for the treatment of illnesses, so as to equip and counsel their patients appropriately for best care and safety.*

**Keywords:** Assessing, Herbal, Medicine Usage

### INTRODUCTION,

There is no life without disease and pain that is why, health and diseases are among the fundamental experiences of human life (Encyclopedia of Bioethics, 2016). The society we live in today also produces ill health and diseases through an unrelenting drive towards profit and a failure to put the health and wellbeing of individuals at the fore-front. Many adult workers experience stress and the risk of physical injury as a result of their occupations, social class grouping, affluence or poverty, gender, age and ethnicity; these has resulted to an individual falling/becoming ill. The concepts that people in various cultures have used in an attempt to understand and respond to these experiences have to do with the way humans relate to nature and their various cultures. With advancement in science and technology, several diseases especially those termed as terminal, such as cancer, high blood pressure, heart diseases, liver diseases in developing countries is as a result of climate change, urbanization and lifestyle changes,

especially western lifestyle (Mwangi and Gitonga, 2014). Various western medicine were used to treat these diseases but with the various side effects recorded and the rise in the record of deaths, people started seeking alternative treatments especially herbs which our fore-fathers used without any side effect. Western medicine has been in existence in Nigeria for over 150 years, yet traditional healing remain a viable part of the complex health system in Nigeria. According to Scot-Emuakpor (2010) a casual survey in Benin City in 1988 revealed that, for every sign-post that indicate a western lifestyle clinic or office, there were three that indicated a traditional doctor. The rapid growth of herbal medicine is an indication that the public, the medical world, social scientists, the media, and governments should pay utmost attention to it. People are questioning the limits of what modern medicine can do or accomplish and are as well seeking additional ways to manage their health. While many are enthusiastically adopting complementary and alternative forms of medicine,

others are skeptical and very critical of those who use alternative medicine. Physicians' attitudes are in transition as well, because, many of them are now accepting the efficacy of alternative medicine, especially herbs and most governments are pondering where this increasingly important phenomenon fits into the health care system of their countries. The challenge is to keep pace with the changing ways that people view health and illness, take responsibility for themselves, and incorporate alternative medicine into their health care as opined by Kelner and Wellman (2000).

It has been reported that in Africa, traditional medicine is used for 80% treatment of health issues in place of primary healthcare and in developing nations as a whole, over one third of the population lack access to essential medicine (Kasilo *et al* 2010). According to Bako, Bakfu, John and Bala, (2005) in Nigeria, the WHO survey estimated that up to 75% of the population patronizes traditional medicine. Onyiapat, Okonkwo and Ogbonnaya (2011) also believe that complementary and alternative medicine use in Nigeria is becoming more popular, as in many other countries of the world. There has been a lot of criticism and attack against the use of herbal medicine, that it is fetish, contains a lot of toxins, the dosage is not measurable and that the practitioners are illiterates who themselves need medical attention. Despite these criticisms, many still prefer herbal treatments to conventional/Orthodox medicine. This study is therefore geared to assess the awareness and usage of herbal medicine for the treatment of illnesses and to what extent residents depends on it. The objectives of the study are to (1) Identify the awareness level of herbal medicine usage, (2) to examine the usage of herbal medicine.

## **MATERIALS AND METHODS**

### **Study area**

The study was carried out in Ibadan metropolis, the capital of Oyo state in Southwest Nigeria, located on seven hills (average elevated 700 feet (200 meters) 100miles (160km) from the Atlantic coast. Ibadan metropolis is made up of eleven local governments consisting of five urban areas and six semi-urban. For the purpose of this study the urban

area is considered and they are Ibadan North, Ibadan Southeast, Southwest, Northeast and Northwest. As at 2015, the population of Ibadan was 3.1 million, and it was estimated that by 2019 the population will rise to 3.7 million (world population review 2019). The economic activities of Ibadan include agriculture, commerce, handcrafts, manufacturing and service industries. Ibadan has a tropical wet and dry climate with a lengthy wet season and relatively constant temperature throughout the course of the year. Ibadan is a forest site containing several ranges of hills, varying in elevation covered by the rain forest; the composition is basically the large tall crowned trees mixed with thick undergrowth. A greater percentage is grass and woodland soils, covered by loamy soils. Like most cities in Nigeria, Ibadan is faced with issue of poor drainage systems and water tight structures which results in flooding. Houses are constructed directly on drain channels and that result to blockade of storm drains and these results in overflow and flooding of streets. (Adelekan 2016, National population Commission of Nigeria, 2006).

### **Experimental Design**

The target population for the study are adult residents in Ibadan between the ages of 20 years and above of both gender. A well-structured questionnaire was used to elicit information from the respondents. Two-stage sampling technique was adopted for the study. The first stage was taking five (5) Local Government areas as clusters from the eleven (11) Local Government areas (Ibadan North, Northwest, and Northeast, southeast and southwest). While the second stage is sampling 200 respondents as sub-units from the clusters sampled which was used for the research. Descriptive and inferential statistics was used, such as simple percentages, frequency counts, mean and correlation analysis to ascertain the level of awareness and usage.

### **Data analysis**

The correlation coefficient relationship between the variables awareness of herbal medicine and use of herbal medicine is shown below:

$$r_{xy} = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}}$$

Where:

$r_{xy}$  – the correlation coefficient of the linear relationship between the variables x and y

$x_i$  – the values of “awareness of herbal medicine”

$\bar{x}$  – the mean of the values of “awareness of herbal medicine”

$y_i$  – the values of “use of herbal medicine”

$\bar{y}$  – the mean of the values “use of herbal medicine”

## RESULT

Table 1 showed that majority of the respondents 111(55.5%) were females this is in agreement with the findings of Patterson and Arthur, 2009, which revealed that young adults, especially females have used complementary and alternative medicine (CAM) in the prevention or treatment of illnesses,

this also corroborates with a Canadian interview (Westfall, 2003), which also found that women consider herbs to be safer because they are “milder”, more “natural”, “simpler”, more “familiar” and caused fewer side effects. The study also revealed that

most of those who use herbs fall in the age range between 20-30, this shows that youths and young adults are now embracing the use of alternative medicine and most have used a form of herbal medical product to cure one illness or the other. The results also shows that most of the respondents 158(78.5%) had tertiary education this is an indication that a lot of educated and enlightened people now patronize herbal medicine practitioners. This findings agrees with the finding of (Hassan et al 2009) that the educated, middle class have turned to herbal remedies and botanicals all over the world.

**Table 1 Demographic characteristic of the respondents**

Variables	Number	Percentage (%)
<b>Age</b>		
20-30 years	76	38
31-40 years	56	28
41-50 years	36	18
51-60 years	15	7.5
61-70 years	9	4.5
71 years and above	8	4
<b>Total</b>	<b>200</b>	<b>100</b>
<b>Gender</b>		
Male	89	44.5
Female	111	55.5
<b>Total</b>	<b>200</b>	<b>100</b>
<b>Marital Status</b>		
Married	103	51.5
Single	86	43
Widow/Widower	6	3
Divorce/Separated	5	2.5
<b>Total</b>	<b>200</b>	<b>100</b>
<b>Educational Status</b>		
Primary school certificate	21	10.5
SSCE/WASCE	22	11
OND	37	18.5
HND/BS.c	72	36
Masters	48	24
<b>Total</b>	<b>200</b>	<b>100</b>

<b>Religion</b>			
	Christianity	152	76
	Islam	48	24
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Occupation</b>			
	Students	64	32
	Civil servant	85	42.5
	Trader/Self-employed	41	20.5
	Unemployed	10	5
	<b>Total</b>	<b>200</b>	<b>100</b>

Table 2 shows that majority 130(65%) of the respondents do not believe herbal medicine include fetish activities; while 70(35%) respondents believe herbal medicine include fetish activities. These two findings above corroborates Adesina (2013) findings, that herbal medicine which is an aspect of

alternative medicine is a cultural gem of various communities around the world and encompasses all kinds of folk medicine, unconventional medicine and indeed any therapeutic method that had been handed down by a traditional, community or ethnic group.

**Table 2. Believe that herbal medicine is fetish activities**

<b>Believe that herbal medicine include fetish activities</b>	<b>Frequency</b>	<b>Percentage (%)</b>
YES	70	35
NO	130	65
<b>Total</b>	<b>200</b>	<b>100</b>

Table 3: shows that 51.5% of respondents come to know of the herbal medicine they are using/have

used through family members with 103(51.5%) with mean value of 1.49.

**Table 3: Sources of herbal medicine to respondents**

<b>S/No.</b>	<b>Items</b>	<b>Yes</b>	<b>No</b>	<b>Mean</b>
1	From health personnel outside hospital setting	23(11.5%)	177(88.5%)	1.89
2	From health personnel in the hospital	14(7%)	185(93%)	1.94
3	From friends	76(38%)	124(62%)	1.63
4	From family members	103(51.5%)	97(48.5%)	1.49
5	From medical herbal Practitioners	51(25.5%)	149(74.5%)	1.75
6	From Mass Media (T.V, Newspaper, radio, magazine)	50(25%)	150(75%)	1.75
7	From your religious group (church/mosque)	13(6.5%)	187(93.5%)	1.94
8	From other patients	24(12%)	176(88%)	1.88

Table 4: shows that (103) 51.5% of respondents come to know of the herbal medicine they are using/have used through family members. This is in

line with the study carried out by (Welz et.al 2018) that family members are one of the most important sources of information concerning herbal medicine. This finding is also in agreement with the previous studies by Oshikoya and Senbanjo et.al (2008),

which further corroborates the fact that the knowledge of traditional medicine is passed from parents to their children, spouses, relatives and friends

**Table 4. Awareness of herbal medicine**

S/N.o	Items	Yes	No	Mean
1	From health personnel outside hospital setting	23(11.5%)	177(88.5%)	1.89
2	From health personnel in the hospital	14(7%)	185(93%)	1.94
3	From friends	76(38%)	124(62%)	1.63
4	From family members	103(51.5%)	97(48.5%)	1.49
5	From medical herbal Practitioners	51(25.5%)	149(74.5%)	1.75
6	From Mass Media (T.V, Newspaper, radio, magazine)	50(25%)	150(75%)	1.75
7	From your religious group (church/mosque)	13(6.5%)	187(93.5%)	1.94
8	From other patients	24(12%)	176(88%)	1.88

Table 5 shows the reasons for deciding to use herbal medicines. About 81.5% of respondents were disappointed that conventional treatment is not working, with Mean value of 1.82, a total of 154 (77%) herbal medicine agrees with one's belief and

inner self with a Mean of 1.77, another 75.5% with a mean value of 1.76 believe that conventional treatment is too toxic, while 71.5% are just trying anything that can help with Mean value of 1.72.

**Table 5: Reasons for use herbal therapies among respondents**

S/No.	Items	Yes	No	Mean
1	You were disappointed that conventional treatment is not working	37(18.5%)	163(81.5%)	1.82
2	Conventional treatment is too toxic	49(24.5%)	151(75.5%)	1.76
3	You think herbal medicine is more in keeping with your belief and your inner self	46(23%)	154(77%)	1.77
4	You are just trying anything that can help	57(28.5%)	143(71.5%)	1.72

Table 6: shows response on other reasons for deciding to use herbal therapies, where majority 35 (17.5%) use it because it is cheaper than conventional medicine. This agrees with a research

carried out by Frenkel *et al.* (2008), where it was found out that, herbal medicine is the only affordable source of health care in some developing countries.

**Table 6: Other reasons for use herbal therapies among respondents**

S/No	Items	Frequency	Percentage %
1	It is natural compare to conventional treatment	28	14
2	They have more of the phytochemicals	16	8
3	Cheaper	35	17.5
4	Conventional drugs are too expensive	24	12
5	Herbal is mixed with conventional drugs	12	6
6	Herbal medicine is less expensive and at the same time effective	32	16
7	I did not want to take drug	10	5
8	I was forced to use it	11	5.5
9	I have strong belief in natural medicine compare to chemicals	12	6
10	Recommended by old adult	9	4.5
11	To bust the immune system	11	5.5
	<b>Total</b>	<b>200</b>	<b>100</b>

Table 7 shows that majority, 57.5% of the respondents use herbal medicine for treating illness, while 24.5% of the respondents indicated they use herbal medicine for preventing illness 18% respondents use herbal medicine for promoting health. This corroborates with the studies of Chitty (2009), Hoslt *et al.*, (2009), and Fakeye *et al.*, (2009)

that people use herbal medicine because of the perception that, it is a safe alternative to conventional pharmaceuticals. This finding also agreed with the findings of Davidson *et.al*, 2008, who opined that the goal of care extends beyond curing an illness to healing the client's psyche, spirit, body and even community.

**Table 7: The purpose of herbal medicine among respondents**

Use of herbal medicine	Frequency	Percentage (%)
Preventing illness	49	24.5
Treating illness	115	57.5
Promoting health	36	18
<b>Total</b>	<b>200</b>	<b>100</b>

Table 8 shows a high perception of usage of herbal medicine among residents in Ibadan metropolis (Df= 198, N= 200,  $r = .593^*$ ,  $P < 0.05$ ). Based on this, the null hypothesis is rejected. Therefore, there is a significant relationship between awareness and the use of herbal medicine among residents in Ibadan metropolis. This also agrees with Ekeze

(2013) in a study of public perception of the role of herbal medicine in health care delivery in Awka, Anambra state where 51% of 180 participants in a research conducted affirmed that there is increased access to herbal medicine which comes in form of home remedies.

**Table 8. Relationship between awareness and usage of herbal medicine among respondents**

Variables	N	Mean	Std. Dev	df	R	P
Awareness of herbal medicine	200	45.6350	11.26795			
Use of herbal medicine	200	41.7250	8.88109	198	.593*	.038

## CONCLUSION AND RECOMMENDATION

Herbal medicine has become a growing area of health in both developed and developing countries. Since residents understand herbal medicine as medicine made from plants, users should consult adults who are more knowledgeable about the administration of herbal medicine and use as prescribed. Users should consult health

professionals before using herbal medicine to know which to use for a particular illness aside or alongside the conventional medical treatment. Therefore, Stake-holders and policy makers in health care issues should draft and implement national policies and regulations to ensure sound evidence of safety, efficacy and quality of herbal medicine.

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