Factors influencing the use of herbs and combination with orthodox medicine for healthcare management in Ibadan, Nigeria

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ABSTRACT

The demand for native medicinal plants has gained much attention among the developing tropical regions of the world in the last decades owing to their relative affordability, acclaimed efficacy and perceived user safety. The rise in the prevalence of chronic diseases, potential treatments and possible cures has led not only to increased patronage, but also to their combination with conventional medicine for better health care delivery and speedy recovery. In this present study, factors influencing these developments were examined. Hence, interview and semi-structured questionnaires were randomly administered among 104 respondents in Ibadan North Local Government Area of Oyo State, Nigeria. Civil servants, self employed (Herb sellers, traditional medicine practitioners and farmers), unemployed (aged people) and students. Based on the responses obtained, 85% of the respondent stated that they make use of herbs, while 12.5% disagreed and 1.9% was undecided. However, 50%, 38% and 14%, agreed, disagreed and were undecided, respectively to combining herbs and orthodox medicine. Occupation was shown to significantly influence the level of herbal usage and its combination with orthodox medicine. The study revealed the high dependence on herbs and the combined of the use of the same with orthodox medicine, with occupation playing a significant role in each case. These observations underscore the importance of traditional medicine as a subsystem of good health delivery and that a double practice exists among health care seekers.

Keywords: Herbs, orthodox medicine, combination, occupation, alternative medicine

1. INTRODUCTION

Traditional medicine according to WHO (WHO, Traditional medicine Geneva, 2003, Fact sheet No. 134) is described as knowledge and belief systems which use minerals, plants and animal based remedies, spiritual therapies and exercises to prevent, treat and maintain well being. Reports have shown that 80% of world's population relies on traditional medicines with medicinal plants predominantly (Ernst, 2005). Over 35,000 of plant species medicinal usage have been well documented with an estimated sales to the tune of US$ 40 billion (Bandaranayake, 2006) and an expected boom. The utilization of medicinal plants is a major part of African heritage. In Nigeria, the majority of citizens still use medicinal plants and visit traditional medicine practitioners for their health care need (Odugbemi, 2006). Lack of medical facilities, poverty, affordability, accessibility and inherent trust in the practice are some of reasons for its continuous usage in this decade. A report by WHO showed Nigerians patronise Traditional Medicine Pactitioners (TMPs) for their primary health needs more than orthodox medical doctors as there exists ratio 1:110 of Traditional Health Practitioners to Nigerian population while the ratio of Medical Doctors to the population is 1:16, 400 (African Health Monitor. 2003. *Traditional Medicine: Our Culture, Our Future*. A magazine of the World Health Organization Regional Office for Africa, 4: 1.). Ibadan, the capital city of Oyo State in the south-western Nigeria is located 128 km inland northeast of Lagos and 530 km southwest of Abuja, the federal capital city. It has a pop ulation of 2,338,659 according to the 2006 census and is the largest Nigerian metropolitan geographical area (3080 km^2) (FRNOG 2007, Federal Republic of Nigeria Official Gazette). *Legal Notice of Publication of the Details of the Breakdown of the National and State Provisional Totals of 2006 Census*, 2007, Government Notice Number 94: 21–24. Nigeria). This city has a tropical wet and dry climate, with a lengthy wet season and relatively constant temperatures throughout the course of the year with a mean total rainfall of 1420 mm, mean maximum temperature of 26 °C (minimum 21 °C), and a relative humidity of 75%. The primary health care sector in the 11 Local Government present in Ibadan is not capable of catering for majority within this ancient city due to population explosion, poor funding of the health sector and lack of basic equipments. Thus, makes the demand for herbs to gain a strong recognition for health care needs. Also, combinations of this "alternative" medicine with orthodox medicine are common practice in the city among those that desire quick recovery (even without professional consultations), which could have an adverse effect on people involved. This study therefore seeks to assess not only the demand for herbs but also its combined use.

2. MATERIALS AND METHODS

2. 1. Study area

This study was carried out in Ibadan North local government area of Ibadan city (Figure 1). Ibadan is the capital city of Oyo State in the south-western Nigeria. The city lies in tropical rainforest, latitude 7°23'47"N and longitude 3°55'0"E with bimodal rainfall pattern and lies about 48 km inside the northern boundary of lowland rain forest zone of western Nigeria. The principal inhabitants of the city are the Yoruba Muslims; others are Christians and Yoruba traditional religion disciples. There are 11 Local Governments Areas (LGAs) in Ibadan metropolitan consisting of five urban local governments in the city (Ibadan North, Ibadan

North- East, Ibadan North-West, Ibadan South-East, Ibadan South-West) and six semi-urban local governments (Akinyele, Egbeda, Ido, Lagelu, Ona-ara, Oluyole). The LGAs are the third tiers of government in Nigeria. The survey was conducted within Ibadan North local government area to capture the urban populace.

2. 2. Interview

One hundred and four respondents were randomly interviewed in Ibadan North Local Government in February, 2017 through convenience sampling. A free, prior and informed consent was solicited from each respondent. The researcher explained to each respondent the objectives of the study. Information was gathered through face to face interviews guided by a semi-structured questionnaire that asked the following: (a) determining the extent of usage of herbs, and (b.) the frequency of combine usage of herbs and orthodox medicine.

2. 3. Data analysis

Data obtained during the interview were extracted to give a summary description of the subject. The demographic characteristics of respondents were presented in graphical form using windows excel 2007. Chi square was used to establish the relationship between the semi-structured questionnaires and was analyzed using SPSS version 21.

## 3. RESULT

3. 1. Demography

The demographic characteristics of the respondents are presented in Figure 1 (a-e). Among 104 respondents interviewed, major informants were around 20-30yrs with frequent 53 and percentage 51% respectively while age 51 above were the least respondents with frequent 7 and percentage 6.7%. Both sex equally interviewees (male, 50% and female, 50% respectively). Most of the interviewees were Islam (77%). The majority of interviewees were university graduates with frequent 45 and percentage 43.3% while primary school leaving certificate holders and others (Biblical or Quranic school graduates) were the least interviewed with frequent 1. The employed (Herb sellers, traditional medicine practitioners and farmers) are the highest respondents (46%) while the unemployed (age people) are the least respondent.
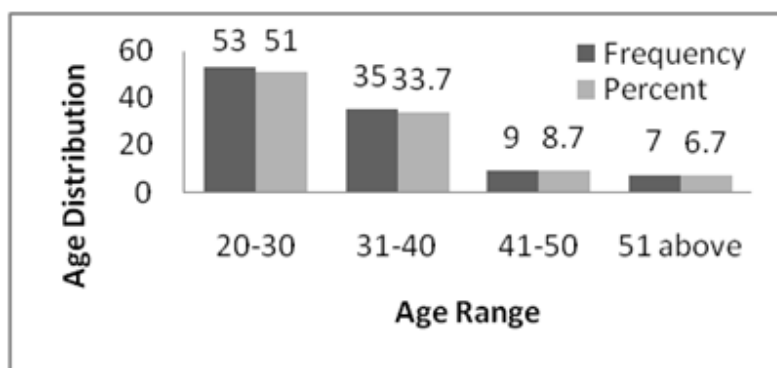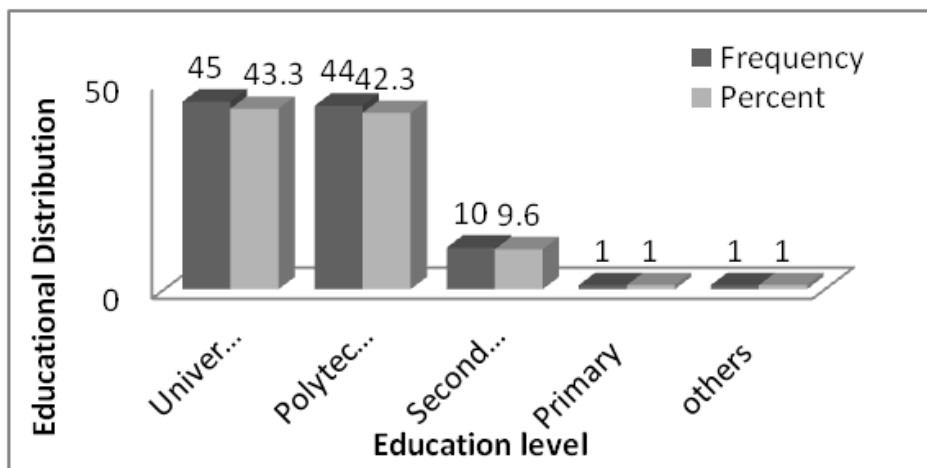

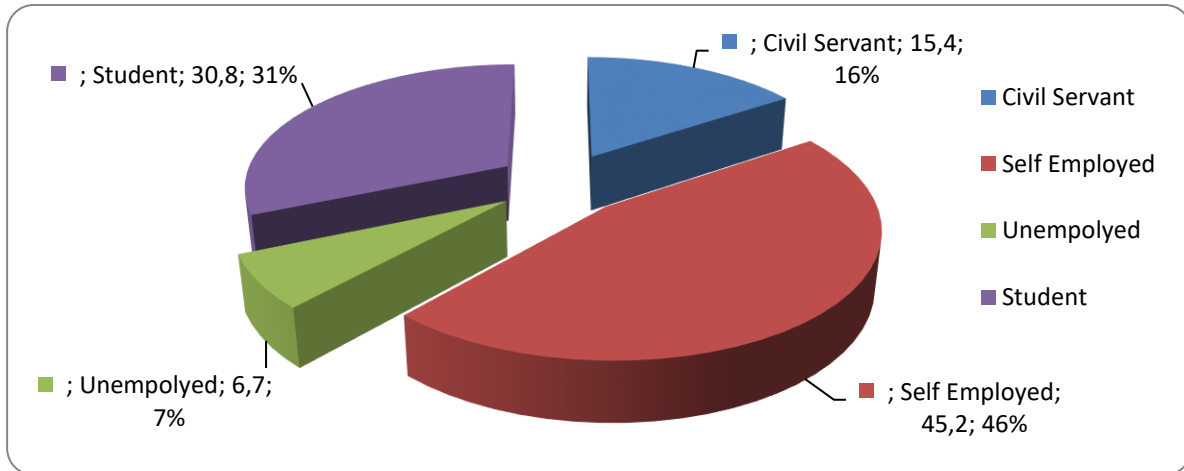**(a)**
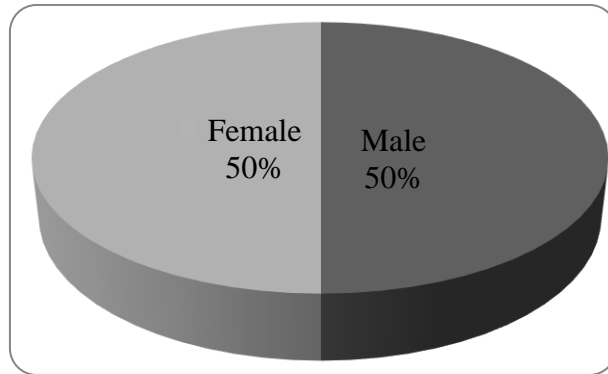
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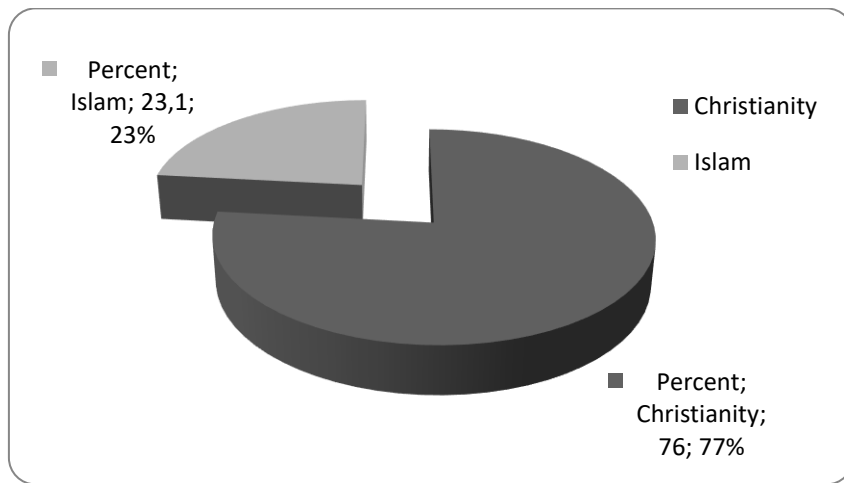
(c)

(d)

(e)

Figure 1. Demographic Characteristics of Informants (a) Age (b) Sex (c) Religion (d) Education (e) Occupation

Herbal usage and combine medication (Orthodox medicine) as practiced by respondents is shown in Table 1. Majority of the respondents agreed to their use of herbs (52.9%), 32.7% established a strong approval and usage of same while 1.9% were undecided on its use, 7.7% disapproved its application and 4.8% strongly opposed its relevance to them respectively. However, while 19.2% confessed strongly to indulge in combine medication, 28.8% agreed to rely on herbs and orthodox medication for quick recovery as 14.4 reserved their opinion, although 27% lightly disagreed while same was greeted by vehement disagreement from about 12% of our respondents.

Table 1. Herbal usage and combination with orthodox medicine as practiced by respondents

S/N	Questions	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Total
		FREQUENCY PERCENTAGE (%)					
1.	I make use of herbs	34 32.7	55 52.9	2 1.9	8 7.7	5 4.8	104 100
2.	I combine herbs & orthodox medicine to aid recovery	20 19.2	30 28.8	16 14.4	27 26.0	12 11.5	104 100

The relationship between socio-demographic factors and herbal usage is shown in Table 2. Factors such as age, sex, religion, educational status of respondents had no significant relationship (P≤ 0.05) with their use of herbs. But respondents' occupation had a significant effect on herbal usage.

Table 2. Bivariate Level of Analysis – Relationship between socio-demographic factors and herbal usage

Characteristics	χ2 value	Df	P value	Decision
Age	16.920	12	0.153	ns
Sex	7.311	4	0.120	ns
Religion	3.083	4	0.544	ns
Education	8.753	16	0.923	ns
Occupation	33.423	12	0.001	S*

S - Significant, ns -Not significant, ***(P≤ 0.05)

The relationship between socio-demographic factors and combine-medication (Herbs and modern medication) is highlighted in Table 3. Significant relationship was established between the occupation of respondents and their adopting of combine-medication while other demographic factors are not significant (P≤ 0.05).

Table 3. Bivariate Level of Analysis – Relationship between socio-demographic factors and combine-medication (Herbs and modern medication)

Characteristics	χ2 value	Df	P value	Decision
Age	13.120	12	0.360	ns
Sex	4.589	4	0.332	ns
Religion	3.896	4	0.420	ns
Education	6.828	12	0.869	ns
Occupation	26.603	12	0.009	S*

S- Significant, ns-Not significant, ***(P≤ 0.05)

4. DISCUSSION

The use of medicinal plants (herbs) among different religious affiliations, occupational, and cultural settings reported by WHO (WHO, Traditional Medicine Strategy 2013-2013, Geneva, 2013) lend credence to this present study where the variables were investigated and

confirmed to have influence not only on its use but also in combination with orthodox medications.

The agreement to the use of medicinal plants in solving health issues by majority of the respondents could be attributed to its availability and accessibility through gardens, and markets (herb sellers). Also, the reliability of herbs and its relatively low cost during purchase accounts for its wide usage (Fasola, 2015). The study of Oreagba *et al.* (2011), further attests to the popularity of herbal medicine usage among people especially in developing countries like Nigeria where 66.8% of respondents in an ethnobotanical survey claimed to depend solely on herbs for their health care.

Although, the use of herbs has mostly been condemned by modern medical practitioners. To these professionals, issues such as herbal standardization, regulation, dosage are of great concern (Ekeanyanwu, 2011). This study revealed a high dependence on herbs separately and in combine status with orthodox medication among the respondents which could be linked to the lack of total dependence or trust in either of the two medications (or available health care) in isolation. High poverty rate and cost of accessing medical facilities within the local government might not be unconnected to these developments. Similarly, the report of Chukwuma *et al.* (2016), showed the high dependence on combination medication (traditional medicine and orthodox medicine) with 63.7% out of 200 respondents which suggests imperfect dependence in any of the health care delivery systems and therefore in accordance with our finding.

The occupation of respondents played a major role in their preference for herbs (herb usage) and combine therapy as statistically significant relationship was established. Oreagba *et al.* (2011) report wher e profession of respondents determined their usage of herbs and Chukwuma *et al.* (2016) in which occupation significantly favoured combine use are in agreement with this study. Related occupational factors, most evidently, type and wages might have a pronounced effect in this regard.

Also, non-association between herbal usage and education as reported by Oreagba *et al.* (2011) corroborates with the finding in this study. Demographic factors such as; age, sex, and religion had no association with the variables studied. though, various reports suggest that the level of education is a reason why one may embrace herbs but recent development and reality points to its use and in fact the combination with other forms of health regardless of the educational status, sex, age and religion of health seekers. This development is possibly as a result of many disease causing organisms that have defied intervention of modern medicine, thereby opening doors for alternative consultations. Consequently, this study is in contrast with other studies (Adibe, 2009; Bamidele *et al.,* 2009; Aderibigbe *et al.,* 2013; Banwat *et al.,* 2015; Chukwuma *et al.,* 2016), where significant relationships were established between the mentioned variables and herbal or combined use.

Drug-herb interaction is not uncommon in combined use. Though, increasing personal responsibility over individual's health both in prevention and treatment of diseases especially chronic ailments influenced preferences and combination in health care. However, proper use of herbs is not only recommended but also complications due to combined use must be avoided and discouraged. Not all natural products are safe!

Institutionalization of both therapies into the national health care scheme is essential as orthodox medicine alone cannot achieve effective health (Elujoba *et al.,* 2005). Before this is achieved, Ekeanyanwu (2011) opined that the prejudices mostly shown by health care professionals, who believed herbal products, are ineffective and reservations by herbalists

alike, who boast of superiority of organic products due to non-exposure to extraction and standardization are one of such issues to be addressed.

5. CONCLUSIONS

The use of herbs and its joint usage with orthodox medicine is becoming rampant and thus, been confirmed in this present study. While it is imperative to check this phenomenon in order to arrest health disaster among users, these observations also underscore the importance of traditional medicine as a subsystem of the health delivery. Thus, it is imperative for government to encourage its acceptance, control and possible integration of same into the health care delivery system. The cultivation of fast disappearing and endangered medicinal plants by initiating short-term conservation measures, while awaiting longer policies embedded in the realms of legislation. It is therefore evident from this study that the practice of regime cannot be underestimated.

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