

Factors Affecting the Utilization of Herbal Medicine as a Livelihood Alternative among Residents of Imo State: The Role of Social Work Professionals

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ABSTARCT: Sound health systems are anchored on absolute wellbeing of societal members, such that they enjoy cautious freewill in selecting from an array of viable alternatives provided by the system for healthier livelihood. Herbal medicine has, in the face of systemic challenges, presented a viable alternative in a largely pluralizing health system. This paper therefore, examined factors affecting the utilization of herbal medicine as a livelihood alternative and the role human service professionals, like social workers, can play in enhancing utilization among residents of Imo state, Nigeria. The study adopted a cross – sectional sample survey research design which that data be collected using both quantitative and qualitative research instruments from among 600 samples using simple random sampling technique. Data collected were analyzed using the Statistical Package for Social Sciences (SPSS), while content analysis was used to analyze the qualitative data. Chi square inferential statistics was used to test the study hypothesis. It was found that over half (53.6%) of the sample use herbal medicines. Factors such as the media (45.1%), cultural beliefs (17.6%), and cost (17.3%), among others were found to affect utilization of herbal medicine in Imo State. The Health Belief Model provided the theoretical locus for understanding this outcome. This paper, however, recommends among others, that herbal medicines should, as a part of a complex health system, be given increased funding for research and development and for wider acceptance in the orthodox medical system.

Keywords: *Herbal Medicine, Livelihood, Health System, Utilization and Social work.*

I. INTRODUCTION

Health as an important component of living represents a pivotal phenomenon in any social system. Thus, all epochs of human existence have developed lasting measures in ensuring good health for its members to prepare them for positive livelihood. The utilization of plants and plant derived products as well as other complementary and alternative therapies in the alleviation of diseases make up a reservoir of indigenous knowledge generally referred to as ethno-medicine (Ogunkunle&Ashiru, 2011).

Long time ago, in traditional societies, herbalism was a way of life rather than a trade as it later turned out to be. If a person fell sick, the other person who knew just what to use went to the nearby bush and brought back herbs that gave relief to the sick (Ogunkunle&Ashiru, 2011). Kafaru (1994), cited in Ogunkunle and Ashiru (2011), stated that in Europe, Asia and the America, herbal medicine was practiced as a magical or religious healing art under separate systems, and by 1850s, Chinese immigrants had added their own herbal tradition to the European and Native American herbalism to produce a mix. He further observed that the early 20th century and the concomitant arrival of hormones, chemotherapy, vitamins, antibiotics and biotechnological products much later marked a sharp decline in the use of herbal medicine. The close of that century, however, ushered in a revival of the use of herbs; in Europe, Asia and America, the focus on herbalism has ceased to be that of religious and spiritual inclination. There is much interest now in the use of basic sciences and their indigenous knowledge to develop up to 80% of pharmaceutical medicines (Jegade, 2002).

WHO has recently estimated that about 80% of the world's population use herbal medicines for some aspects of primary health care (WHO, 2006). Herbal medicine essentially represents a natural form of health care which has been used through generations. According to Adesina (2008), Nigerians have a deep belief and reliance on the services of herbal medicine

practitioners for their health care needs. An estimated 75% of the population still prefers to solve their health problems by consulting herbalists (Adesina, 2008). The definite trend to adopt plant-based products has been due to increasing awareness of the cumulative derogatory effects resulting from the use of synthetic and antibiotics drugs (Ogunkunle&Ashiru, 2011).

The oldest component of the Nigerian health sector consists of traditional healers and birth attendants, who are the *de facto* providers of primary health care. Healers provide client-centered and personalized health care that is culturally appropriate, holistic and tailored to meet the needs and expectations of the patients (Iwu 1994, cited in Abubakar, Musa, Ahmed, &Hussaini, 2007). However, there is a great diversity in the plants used in herbal medicines; the diversity varies with local cultures and tradition, resulting in severe difficulty in the standardization of herbal medicaments (Adeola, 1992; Abubakar et al, 2007; Adefolaju, 2011). Adefolaju (2011) attributes this to the proliferation of herbal medicine practitioners in Nigeria, many of whom are not licensed, lack sophisticated knowledge of the toxicological components of the herbs they advance or administer on their patients.

According to Ayiteh-Smith cited in Okoli, Aigbe, Ohaju-Obodo, and Mensah (2007), herbal medicines evolved from environmental resources, which the people of a community adopted in desperation for survival from diseases and to improve livelihood generally; it was a part of the medical system for health care before the advent of orthodox or modern medicine. Herbal medicines in spite of its popularity have been challenged on many grounds; one of such is that its popularity is based on anecdotal experiences of patients (Erinosho, 2006). Osborne (2007) notes that the practitioners inflate the claims attached to advertisement and its products, as well as not having scientific data about its effectiveness, thus making it difficult to ascertain legitimate and effective therapy and therapists. Furthermore, most of the claims of the herbal practitioners are said to be unsubstantiated and their post market monitoring has been difficult. Akinleye (2008) corroborated this when he identified some of the drawbacks of herbal medicine as: incorrect diagnosis, imprecise dosage, low hygiene standards, the secrecy of some healing methods and the absence of written records about the patients.

Tyler (1999 cited in Ekeanyanwu, 2011) opined that the prejudice of current practicing health care professionals who did not learn about phytomedicines during their academic programs and consequently, believe all of them to be ineffective, forms a barrier to the advancement of herbal medicines in Nigeria. Herbal medicine practice in Nigeria, however, faces greater challenges in the hands of government officials who look at it with disdain and disrespect (Adefolaju, 2011). This is manifested in the Nigeria government's reluctance to accord herbal medicine its primate position in the health care delivery system as it is the case with China and India (Adefolaju, 2011).

Nigerian health systems must be anchored on absolute wellbeing of her members, such that they enjoy cautious freedom in exercising an informed freewill in selecting from an array of viable alternatives provided by the system – this system must of necessity provide actors for this purpose. Thus, the social worker in health care system helps the patient to be aware of all the available treatment alternatives within the system, and to understand and make informed choices as well as adjust to appropriate health procedures. Professional social workers go further to interpret and explain medical plans, providing the opportunity for airing of feelings, and assisting the family with financial planning. Mitrowski (1983) opined that the role of the social worker is one of advocacy and liaison between the patient's family and the health care system, and facilitating communication among the patient, his family, and the health care professionals involved. Identifying the strengths which lie within the health system and encouraging the use of these assets by all members of the health care team and entire society, is the distinctive role of the medical social worker.

This study therefore, specifically, aims at examining the extent of utilization of herbal medicines and factors affecting utilization of herbal medicine as a livelihood alternative in the health system as well as the roles social workers can play in promoting its utilization in Imo state, Nigeria. The study hypothesized that the religion one professes influences one's use of herbal medicines.

LITERATURE REVIEW

The World Health Organization (WHO, 2006) reported that about 80% of people living in Africa use herbs for the management and prevention of disease. Almost half of the population in many countries use herbal preparations; France 49%, Canada 70% and considerable use exist in many developing countries; Chile 71%, Columbia 40% (Bodeker and Kornberg, 2007). A survey conducted in the member states of the European Union (EU) in 2007 revealed that 1400 herbal drugs were used in European Economic Community by patients (WHO, 2008). In America among 35 WHO member states which has a high percentage of indigenous population and 60% of world's biodiversity, there is a high use of herbal medicine through folk healers such as Herbalist, Masseurs, Bone-settlers and spiritual therapist by some indigenous population in Latin America, and traditional medicine use is also increasing steadily in form of herbal therapy (Gupta, 2005).

In the study conducted by Oshikoya, Sebanjo and Njokanma (2009) to determine the knowledge of Nigerian mothers about colic – their home base management, extent of self-medication for the infants with colic and the types of medicines involved. They found that, of the 558 infants that experienced colic, 378 (67.7%) sought medical intervention in a hospital. Also 17 (3.1%) were treated by traditional herbal medicine practitioner. Herbal medicines were the most frequently used (51.8%) of which 48 (26.2%) were *ororo-ogiri*, 22 (12.0%) were a mixture of allionasaconicum (Onion) leaves; allium Sativum (Garlic) and allium asalonicum leaves soaked in water (7.1%). The components of the remaining 68 herbal medicines could not be ascertained by mothers.

Ekeze (2013), in a study of public perception of the role of herbal medicine in healthcare delivery in Awka South LGA of Anambra State Nigeria found that 52.6% of the 180 study participants use herbal medicine. However, 51.5% affirmed that there is increased access to herbal medicine which come more in form of home remedies. The WHO (2003) estimates that most people living in Africa use herbal medicines for the management or prevention of disease. This high use of herbal medicine may be due to accessibility, affordability, availability and acceptability of traditional herbal medicines by majority of rural population especially in developing countries. In Nigeria, the first line of treatment of malaria by majority of the rural population is the use of herbal medicine (Okonkwo 2003).

A survey conducted by Abubakar, Musa, Ahmed and Hussaini (2007) on herbal medicine use among ante-natal women in a tertiary hospital in Kano revealed that about 40% of those using herbal medicine admitted to have been engaged in self-medication of orthodox drugs during pregnancy. On their reason for using herbal medicine, 94.3% of the respondents said they use herbal medicine because it is their traditional medicine, while 87.3% said they will still use herbal medicine because they have been using it from birth. Nearly 80% of them are not sure of its efficacy, 58.6% said they will use it in the future. Mothers, pears, radio, television, community, society and traditional healers were important sources of information on herbal medicine for the respondents.

Another survey carried out in the US by Vickers and Zollman (2009) on the account of herbal medicine on 65 patients of a primary healthcare facility. The participants were more likely to be over 46 year of age (56.7%), Asia Indians (45.5%), female (73.2%), with an annual household income of less than US \$10,000 (84.1%) and with less than seven years of formal education (49.1%). Patients attended these primary healthcare facilities for various health conditions, but the most common reasons were for chronic disease management including hypertension (28%), diabetes mellitus (27%) and asthma (5%). They were treated with standard drugs and 41.1% of these patients indicated that they were compliant with the physician-prescribed herbal medication.

In another development, Fakeye, Adisa and Musa (2009), concluded a research on the attitude and use of herbal medicine among pregnant women in Nigeria. Opinions of 595 pregnant women in six geo-political zones in Nigeria on the use of herbal medicines, safety on the usage, knowledge of potential effects of herbal remedies on the foetus and potential benefits or harms that may be derived from combining herbal remedies with conventional therapies were obtained using a structured questionnaire between September 2007 and March 2008. Descriptive statistics and Fisher's extract tests were used at 95% confidence level to evaluate the data obtained. Level of significance was set at $P < 0.5$. They found that more than two-third of the respondents (67.5%) had used herbal medicines in forms, with 74.3% preferring self-prepared formulations. Respondents' reasons for taking herbal medications were varied and included reasons such as herbs having better efficacy than conventional medicines (24.4%), herbs being natural are safer to use during pregnancy than conventional medicines (21.1%), low efficacy of conventional medicine (19.7%), easier access to herbal medicine to cure many illness (12.5%) and comparatively low cost of herbal medicines (5.9%).

Social work is a professional and academic discipline that seeks to improve the quality of life and enhance the well being of individuals, families, couples, groups, and communities through research, policy planning, community development, direct practice, crisis intervention, ensuring social welfare and security for those affected by social disadvantages such as poverty, psychosocial care to mentally and physically disabled, and raising voices against social injustice for social reforms, including social actions against violations of civil liberties and human rights (Australian Association of Social Work, 2013). It is a progressive profession where one can be actively engaged in helping others to help themselves. Social work is a broad profession that

encompasses its activities in various fields but with specialized services in the Health care system, Social Service Administration, family and child welfare services, Policy analysis etc.

THEORETICAL FRAMEWORK

The Health Belief Model (HBM) was developed in the early 1950s by social scientists like Hochbaum, Kegels and Rosenstock at the US public health service in order to understand the failure of people to adopt disease prevention strategies or screening test for the early detection of disease (Croyle, 2005). Later in 1970s and 1980s HBM was further developed by Rosenstock and Becker. HBM is a psychological model that attempts to explain and predict health behaviour. This is done by focusing on the attitudes and beliefs of individuals; HBM suggests that a person's belief in personal threat of an illness or disease together with a person's belief in the effectiveness of the recommended health behaviour or action will predict the likelihood that the person will adopt a given health seeking behaviour (Croyle, 2005).

The theory provides an ideal context in which factors affecting utilization of herbal medicine can be understood. HBM suggests that a person's belief in personal threat of an illness or disease together with a person's belief in the effectiveness of the recommended health behaviour or action will predict the likelihood that the person will adopt a given health seeking behaviour. The HBM was spelt out in terms of four constructs representing the perceived threat and net benefit of a given health option – this four-dimensional approach to the understanding of peoples' willingness to adopt a particular health option, is directly situated within the context of their generalized belief about the said health option; which ultimately determines whether or not they will adopt that health option.

II. METHODOLOGY

This study made use of cross – sectional sample survey research design. It adopted a variety of probability sampling techniques. Out of the twenty-seven (27) Local Government Areas that make up Imo State, AbohMbaise and Owerri Municipal were selected using the balloting method of simple random sampling. The population of AbohMbaise and Owerri Municipal LGAs is put at 194, 779 and 125,337 persons respectively (National Population Commission, 2006). Thus, the total population for the two LGAs is at 320,116 comprising 161,932 males and 158,184 females. However, the target population for this study comprised all adult male and female (18 years and above) resident within the study areas. AbohMbaise and Owerri municipal LGAs in Imo state of Nigeria have a rich flora and fauna of medicinal plants (Ekeanyanwu, 2011) and a high literacy rate (Federal Office of Statistics, 2011); thus, it is appropriate, giving the preponderance of herbs in this areas, that a study of this nature be conducted to examine factors that influence the use of herbal medicines.

The sample size for the study was six hundred (600) adult members of the public (18 years and above) resident in AbohMbaise and Owerri Municipal LGAs within the timeframe of this research. The sample size was statistically determined using Fisher's proportional stratified sample method. The cluster (multistage) sampling approach involving division of the population or geographical area into units and selecting specific number of these units by simple random sampling techniques was adopted for selection of respondents. Respondents were selected in such a way that categories within each gender were adequately represented (i.e. married and unmarried, male and female adults e.t.c). The list of selected LGAs, communities and Villages/Streets is shown on Table 1 below;

Table 1: List of Selected Towns/Villages in Owerri Municipal and AbohMbaise LGAs

LGAs	COMMUNITIES	VILLAGES/STR	NO. OF RESPONDENTS
Owerri Municipal (Urban)	Amawom	World Bank Estate	100
	Umuororonjo	Ikenegbu Layout	100
	Umuodu	Wetheral	100
			n=300
AbohMbaise (Rural)	Enyi-ogugu	Osina	60
	Ibeku	Oborji	60
	Lorji	Ezuala	60
	Nguru-nweke	Egbelu	60
	Umuhu	Ezuala-umuhu	60
			n=300
Total	8 Communities	8 Villages/Street	n=600

Source: *Field Survey, 2015*

A structured questionnaire schedule, In-Depth Interview (IDI) and Focus Group Discussion (FGD) guides were the major instruments of data collection. Data collected were analyzed using the Statistical Package for Social Sciences (SPSS), while content analysis was used to analyze the qualitative data. Chi square inferential statistics was used to test the study hypothesis.

FINDINGS

Data for this study were collected between October, 2014 and January 2015 using both quantitative

(Questionnaires) and qualitative (FGD and IDI) instruments; A uniform set of questionnaire was administered to a total of six hundred (600) adult members of the public (18 years and above) in a rural and an urban area of Imo state chosen for the study, (AbohMbaise and Owerri Municipal LGAs). In all, twenty three (23) questionnaires were not accounted for, from the rural area, which comprised those not properly filled and those that could not be retrieved. Therefore, five hundred and seventy-seven (577) questionnaires were considered valid for analysis. Three different sets of In-depth Interview Guides were administered to three different categories of participants (a herbal medical practitioner, An orthodox medical practitioner and a staff of NAFDAC) on a face to face basis.

Research Objective One:

“To examine the extent of utilization of herbal medicine in Imo State” The findings are shown in tables 2, 3 and

4.

Table 2: Respondents Perception of Herbal Medicine

<i>Respondents' Use of Herbal Medicine</i>	<i>Frequency (F)</i>	<i>Percentage (%)</i>
Yes	309	53.6
No	268	46.4
Total	577	100.0
<i>Words or phrase that come to your mind when you hear Herbal Medicine is mentioned</i>	<i>F</i>	<i>%</i>
Natural/Nature	313	54.2
Alternative Medicine	102	17.7
Easily Available	95	16.5
Have stood the test of time	19	3.3
Unsafe/Risky	16	2.8
Don't need to see a Doctor	12	2.1
Expensive	3	.5
Safe/Beneficial	9	1.6
Cheap	8	1.4
Total	577	100.0

Field survey 2015

Table 2 shows that 53.6% of the respondents have used herbal medicines in the study area. However, some (46.4%) of the respondents indicated that they have never used herbal medicines. The table further presents the respondents' perception of herbal medicine, as majority (54.2%) of them indicated that they perceive herbal medicines as “natural” medicines devoid of any side-effects. This is corroborated by the assertion of majority of the FGD participants, Herbal Medicine Practitioner and an official of NAFDAC. An urban FGD participant averred; “When I hear about herbal medicine, what comes to my mind is that nature has come, because 90% of what it contains is natural” (Male, 35years, civil servant). This was further corroborated by the assertion of an IDI respondent who stated thus; “when I hear of herbal, I think of natural products. Things that are not chemical...well, not synthetic, that is from nature. That is my general view about herbs” (Female, NAFDAC official). A Female urban FGD participant, however, presents an entirely divergent view when she opined thus;

...when I hear herbal medicine, I just believe that they are drugs produced by “less literate people”, I’m sorry to say... because you notice that they say that one particular herbal medicine is used to cure malaria, gonorrhoea, staphylococcus and so on. I kind of ask myself, is it actually possible?
(Female, 30years, Teacher)

Despite the above argument, findings from both the qualitative and quantitative data show that majority of the respondents hold a positive perception about herbal medicine and thus, use it.

Table 3: Respondents opinion on the availability of Herbal Medical Centres

<i>Availability of Herbal Medical Centres in your Community</i>	<i>Frequency (F)</i>	<i>Percentage (%)</i>
Yes	475	82.3
No	46	8.0

Don't Know	56	9.7
Total	577	100.0
<i>If yes, have you ever visited any of them?</i>	<i>F</i>	<i>%</i>
Yes	170	35.8
No	305	64.2
Total	475	100.0

field survey 2015

Table 3 indicates that majority (82.3%) of the respondents acceded to the fact that Herbal Medical Centers (HMCs) exist in the study area. However, significant proportions (64.2%) of them are yet to visit these centres; only 35.8% indicated that they have visited HMCs. The table also shows that 8.0% of the respondents are of the view that there is no HMCs in the study area, as 9.7% stated that they do not know whether it is available or not. This shows that despite the availability of HMCs in the study area, patronage remains a huge challenge; as many of the people who make use of herbal preparations do so without proper prescription owing to the fact that these preparations are made handy by their availability in the environment. Data from the IDI conducted with a NAFDAC official confirms the existence of HMCs in the study area, as the respondent stated;

... from what we do as an agency, we work with them a lot and we even sanction them where necessary. We register their products, we do routine inspection for them, we do surveillance, we carryout raids and generally sanction them when things are going against what they are expected to do. (Female, NAFDAC official)

Data from the IDI conducted with a Herbal Medicine Practitioner (HMP) reveals the existence of HMCs in the study area but with minimal level of patronage. The HMP puts it thus;

People come to believe in herbal medicine when orthodox medicines disappoint them. But, if they are sick at first instance and you mention herbal medicine to them they will behave somehow. But after they have wasted money and time, they now come to us for treatment, and you know we are very affordable (*laughs*). (Male, 46years, HMP)

The FGD participants all stated that HMCs are available in the study area, however only a few of them have visited any. This goes to show a high level of consonance between the quantitative and qualitative data.

Table 4: Respondents view on their first Health Option during illness

<i>Decisions on health options to choose when sick</i>	<i>Frequency (F)</i>	<i>Percentage (%)</i>
Roots and Plants Extracts	58	10.1
Consult a Medical Doctor	223	38.6
Visit a Herbalist	67	11.6
Take Chinese Herbal Medicine	41	7.1
Visit a Chemist Shop	188	32.6
Total	577	100

Field survey 2015

Table 4 shows that 38.6% of the respondents indicated that they will consult a medical doctor as their first health option in the event that they fell sick. Respondents who stated that they will visit a herbalist constituted 11.6% of the study population, This further corroborates earlier submissions by the respondents, indicating low attendance to HMCs but a high utilization and acceptance rate of herbal medicines/preparations. IDI with an orthodox medical practitioner reveals the *raison-d'être* many people prefer to first consult orthodox doctors. The IDI respondent puts it thus;

You cannot compare the modus of our treatment to those of Herbal practitioners; we are trained to be rigorous in our diagnosis. That is why we would first subject our patients to laboratory test before commencing definitive treatment, our practice is standardized and that is the edge we have over our colleagues who are into herbalism... (Male, 52years, Medical Doctor)

This is further supported by the views of some of the FGD participants who stated that they will first consult their Medical Doctors whenever they fell sick. One of the urban FGD participants submitted; "The only thing that comes to my mind whenever I get sick is orthodox medicine... I believe the herbal people are not safe enough" (Male, 42years, civil servant). In contrast to this view, a rural FGD participant averred;

In fact, I am older than all of them here, so I can tell you that I have used herbs many times and it is yet to fail me. Why then should I waste money on orthodox medicine

when I can easily use the herbs around my bush here to treat myself” (Female, 51years, Trader)

The data above brings out clearly the high level of utilization of herbal medicines enjoyed in the rural areas, which can be explained by socio-economic and cultural factors that impinge on the people’s access to modern medicine. An official of NAFDAC summarized it in these words;

To me, I think it has to with the literacy level... that is my own idea, because these HMPs are working without proper diagnosis... they tend to work blindly, unlike the orthodox medical practitioners who will want to carry out laboratory investigations and then properly diagnose the cause of the illness. So, personally I wouldn’t want to go to the herbal medical practitioner for treatment... it’s my own personal opinion though. (Female, NAFDAC official)

In defiance to the claim of non-diagnosis before treatment, a herbal medicine practitioner submitted; ...we do everything that the orthodox Doctors do and even more. The fundamental difference is that we treat with herbs, which are very natural. Gone are the days when Herbal Doctors do “trial and error”, we employ the use of modern technology in ascertaining what may be wrong with our patients before treating them, You know we have quacks among orthodox Doctors, the same is applicable among us herbal practitioners (Male, 46years, HMP).

This goes on to confirm the argument in literature about the little or no emphasis of herbal medicines in the training of orthodox Doctors, who in turn transfer the same prejudice to their patients/clients. In spite of this, herbal medicines are still used in what may be conceptualized as “improper utilization” - a situation where people take herbal medicines without prescription, in the belief that it has no side-effects.

Research Objective Two:

“To investigate the factors that influences the utilization of herbal medicine in Imo State”.

The findings are shown in table 5

Table 5: Factors that Influence the Utilization of Herbal Medicines

<i>Factors that determine use of herbal medicines</i>	<i>Frequency (F)</i>	<i>Percentage (%)</i>
Family/Friends/Colleagues	33	5.7
Cultural Belief	102	17.6
Cost	100	17.3
Herbal Practitioners	13	2.3
Magazines/Books/Television/Radio/Media	260	45.1
Level of Education	51	8.8
Regulatory Agencies	18	3.1
Total	577	100

Field survey 2015

Table 5 shows clearly the factors that influence the use of herbal medicine which. Thus, the mass media represented by magazines/books/television and radio with 45.1% of total responses account for the major factor that influences the use of herbal medicines. This is followed by cultural belief (17.6%), cost (17.3%), level of education (8.8%), family/friends/colleagues (5.7%), regulatory (3.1%), and herbal practitioners (2.3%). Data gotten from the qualitative instruments revealed more in-depth factors that inform the use of herbal medicines within the study population. An IDI respondent posited;

The factor that shapes my attitude towards herbal medicines, I will say is my level of exposure and then my educational qualification... I have had the privilege of being exposed to the primary, secondary and tertiary level up to the Doctorate degree level. Having gone through these levels I know better than to pick on any medication and just use it to cure or treat myself of any illness. Even if I have to go for that herbal medicine, I have to go for proper diagnosis and then be sure of the herbal medication. Be sure of the components... you know... be sure of everything about the medication before I can rely on it. Because some of these herbal medications, you find that even when we are registering them for the people, we make them declare on the product that “this claims have not been evaluated by NAFDAC”. Although there are some that have passed through trials with experimental animals; so for these ones we know, yes, these ones have passed through trials. But for those ones that you have (pauses)... disclaimer

on it, those ones have not gone through any trials. (Female, NAFDAC official)

Participants in the FGD session identified such factors as culture, educational level, personal experience, low access to orthodox healthcare, family background and cost as predictors of herbal medicine utilization within the study area. These go on to show that some factors that account utilization can also account for underutilization of herbal drugs. For instance, cost of herbal medicines can deter or encourage its utilization, the same goes for individuals' personal experiences. However, level of education from the perspective of the qualitative data, can serve as tool for striking the balance. That is, educated people are predisposed to properly utilizing herbal medicines than uneducated people. This is where the role of professional social workers become germane, at least for the purpose of sensitization, and helping to bridge the gap between Herbal Medical Practitioners and prospective patients/clients.

Research Objective Three:

“To ascertain how the utilization of herbal medicines can be improved in Imo State”. The findings are shown in tables 6 and 7.

Table 6: Respondents view on the Regulation of Herbal Medicine

<i>Regulation of herbal medicines in the community</i>	<i>Frequency (F)</i>	<i>Percentage (%)</i>
Yes	261	45.2
No	150	26.0
Some are, some are not	118	20.5
Don't Know	48	8.3
Total	577	100.0
<i>Organization, if any, that regulates herbal medicine to make it safe for use in the community</i>	<i>F</i>	<i>%</i>
Ministry of Health	69	12.0
Nigeria Herbal Medical Association	130	22.5
Manufacturers of Herbal Medicine	64	11.1
NAFDAC	220	38.1
Don't know	94	16.3
Total	577	100

Field survey 2015

Table 6 shows that a significant proportion (45.2%) of the respondents stated that herbal medicines are regulated in the study area. A look at the table further shows that 38.1% of the respondents posited that NAFDAC regulates the production and sales of herbal medicine in the study area. However, 16.3% of the respondents do not know which organization regulates herbal medicines in the study area. The IDI data revealed that herbal medicines are actually regulated by Standards Organization of Nigeria (SON), with NAFDAC just enforcing the standards. The respondent puts it thus;

...we have Standard Organization of Nigeria (SON). Those are the people who actually set standards and we (NAFDAC) enforce these regulations... they have a role to play there. So these standards if they are set, we now regulate, we ensure that herbal medicine producers/practitioners work along with such standards (Female, NAFDAC official)

Majority of the FGD participants posited that herbal medicines are regulated by NAFDAC, the same opinion is held by both the HMP and medical Doctor interviewed. This shows a high level of awareness of the role of NAFDAC in drugs regulation among the study participants.

Table 7: Respondents' view on how to enhance the Utilization of Herbal Medicine

<i>Ways to improve the status of herbal medicine in the community</i>	<i>F</i>	<i>%</i>
Enabling legislations to back the activities of herbal medicine practitioners	100	17.3
Increased funding for research into herbal medicine	265	45.9
Inclusion of herbal medicines into the curriculum of medical and pharmacy students	59	10.2
Enhanced media coverage of herbal medicines	45	7.8
Introduction of Complementary and Alternative Medical practice at all levels of healthcare delivery	38	6.6

Engage the people in sensitization programs using Professional Social workers	70	12.1
Total	577	100

Field survey 2015

The table reveals that 45.9% of the respondents advocated for increased funding for research into herbal medicine, with only about 12.1% of the respondents identifying the need to engage the services of professional social workers in sensitizing the people on the benefits of herbal medicine and how to ensure proper utilization. Data from the qualitative instrument supports these findings, though some of the FGD participants advocated for improved training for HMPs and general overhaul of their modus operandi, such as proper documentation of major pharmacological breakthroughs. It thus follows, that the role of professional social workers in improving the status of herbal medicine and its subsequent utilization, is still poorly recognized. This accounts for why so many herbal medicine users engage in improper usage or self-medication.

STUDY HYPOTHESIS

There is a significant relationship between religious affiliation and use of herbal medicine in Imo State”. Data in Table 8 formed the basis for testing this hypothesis.

Table 8: Relationship between religious affiliation and use of herbal medicine

What is your religious affiliation?	Have you ever used herbal medicine?		
	Yes	No	Total
Catholics	146	131	277
Protestants	151	122	273
Islam	2	4	6
African Traditional religion	10	11	21
Total	309	268	577

$$X^2 = 1.702; df = 3; P < .636$$

No significant relationship was observed between religious affiliation and use of herbal medicines at p=.636 level of significance. Thus, there is no significant relationship between religious affiliation of respondents and use of herbal medicines in Imo state, Nigeria.

III. CONCLUSION/RECOMMENDATIONS

The growing importance of herbal medicine across the globe is on a rapid increase, this, as confirmed by this study, is due directly to a plethora of factors, one of such been the increasing acceptance and utilization of herbal drugs - Hence, the study topic. It was shown in this study that herbal medicines are, to a large extent, utilized in various forms in Imo state following the assertion of majority of the study participants. This explains why the WHO (2007) stated that most people living in Africa use herbal medicines for the managements or prevention of diseases. This finding further corroborates earlier assertions by Nwachukwu et al (2010) who opined that in many region of the world where modern health care is not readily available; the people continue to rely on traditional herbal medicines which are based on locally available natural resources and cultural knowledge.

Factors ranging from the media, family, friends/colleagues, cultural beliefs, cost, and level of education were found to negatively affect the utilization of herbal medicine in Imo state. This is corroborated by earlier findings in Abubakar et al (2007) and Vickers and Zollman (2009) where they stated that Mothers, peers, radio, television, community and society were important sources of information on herbal medicine. This goes to show that herbal medicines are improperly utilized, because it is seen as traditional medicine which has no side-effects. This finding is further supported by Oreagba et al (2011) when they observed in their study that among 388 residents of urban Lagos who use herbal medicine, 45.2% were influenced by friends, relatives and colleagues to use herbal medicine and not HMPs. These submissions are captured by the tenets of the Health Belief Model (HBM). The HBM suggests that a person’s belief in personal threat of an illness or disease together with a person’s belief in the effectiveness of the recommended health behaviour or action will predict the likelihood that the person will adopt a given health seeking behaviour, i.e. herbal medicine. This study further, showed no significant relationship between religious affiliation and use of herbal medicines at p=.636 level of significance.

It was observed in this study that it is important that herbal medicines are regulated. Majority of the study participant identified NAFDAC as the organization that should be responsible for this task. However, an IDI with a NAFDAC official revealed that NAFDAC is not the only agency responsible for the regulation of herbal medicines in Imo state, the Standards Organization of Nigeria (SON) was stated to be the organization statutorily responsible for product standardization in the country, including drugs (herbal and orthodox). NAFDAC mainly plays an enforcement or implementation role in the regulatory process. The official puts it thus;

...we have Standard Organization of Nigeria (SON). Those are the people who actually set standards and we (NAFDAC) enforce these regulations... they have a role to play there. So these standards if they are set, we now regulate, we ensure that herbal medicine producers/practitioners work along with such standards (Female, NAFDAC official)

Finally, the study showed that professional social workers are still poorly engaged in the sensitization of the public on proper utilization of herbal medicines. Based on the findings of this research, the following recommendations are made in order to enhance the perception of herbal medicines and ensure that herbal medicines are better re-positioned to play their roles in healthcare delivery effectively and efficiently;

- i. Enabling legislations should be promulgated to back the activities of herbal medicine practitioners so as to give them competitive edge over orthodox medicines as is the case with China, India and even Ghana.
- ii. Government and corporate bodies should increase funding for research into herbal medicines, as Nigeria is endowed with a rich flora and fauna that can be explored and exploited to the health benefit of the people.
- iii. A specially designed curriculum on herbal medicines should be included in the study curriculum of Students studying Medicine and Pharmacy in all tertiary institutions across the country. This will go a long way in improving the perception of herbal medicines in the country, as many Nigerians who use herbal medicines still consult with orthodox medical doctors.
- iv. There should be enhanced media coverage of herbal medicines in Imo state; this will help address the issue of incorrect information about herbal medicines in Imo state.
- v. Complementary and Alternative Medicine (CAM) should be introduced at all levels of healthcare delivery in Imo state. This will further enhance the perception and subsequent utilization of herbal medicines in the State.
- vi. Herbal Medicine Practitioners (HMPs) should be trained and re-trained to keep them updated with contemporary trends in the world of health and epidemiology.
- vii. Thorough check must be run on the ingredients contained in a herbal preparation to ensure that it is safe before the product is allowed to be sold in the market.
- viii. A central body to which anyone can report any side-effects should be setup and empowered for more effective product monitoring of herbal medicines.
- ix. Professional social workers should be engaged in the sensitization of members of the public on how to maximize the benefits of herbal medicines.

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