

**PREPARED HERBAL REMEDY USE AMONG ARTISANS IN NSUKKA (NIGERIA)
MOTOR-MECHANIC VILLAGE**

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ABSTRACT

An indeterminate amount of alcohol is concealed in prepared herbal remedies. This deception requires focused and concerted efforts to address the problem. The present study used a mixed-method design to evaluate two objectives. The first objective was to determine the prevalence of use of some common variants of prepared herbal remedies among artisans in Nsukka motor-mechanic village. The second objective was to determine why artisans use herbal medicines. Data for this study were conducted using unobtrusive observation, interviews, and a structured questionnaire. Participants for study 1 (n = 94) were sampled from about 205 artisans in Nsukka motor-mechanic village. Descriptive statistics showed that there was high prevalence of use of prepared herbal remedies among the sample. Twelve (12) participants (study 2; participants were not part of the 94 in study 1) were interviewed at different spots in the motor-mechanic village. Qualitative data, which were analyzed by relating outstanding points of response to the objectives of the study showed craving for alcohol, belief in the efficacy of herbal remedies, poverty, and poor treatment of artisans by health workers as some of the reasons that sustain the use of prepared herbal remedies among the sample.

Keywords: herbal remedies, alcohol, artisans, Nsukka

INTRODUCTION

The World Health Organization (WHO, 2010), estimates that about 80 per cent of the populations in developing countries, such as Nigeria, depend on prepared

herbal remedies for their primary health care needs. Prepared herbal remedy is a concoction of plants parts, such as roots, leaves, bark and trunk boiled in water or soaked in alcohol. The origin of prepared herbal remedies among the Igbo

people of South-Eastern Nigeria is rooted in the people's cultural belief that herbs are potent remedies for several kinds of ailments. Even before the advent of the white missionaries, the Igbo people have used hundreds of indigenous plants and herbs for the treatment of typhoid fever, malaria, migraine, chronic fatigue, irritable bowel syndrome, arthritis, and many other sicknesses. Chinua Achebe in his book *"Things fall apart"* portrayed the value the Igbo people attached to prepared herbal remedy. Achebe (1958) wrote: "It is *iba* (i.e., fever)," said Okonkwo as he took his machet and went into the bush to collect the leaves and grasses and barks of trees that went into making the medicine for *iba* (p. 61). In the traditional Igbo society, if one wants to prepare a herbal remedy, the individual must cut a large bundle of grasses and leaves, roots and barks of medicinal trees and shrubs, then the best from the bundle, in their due proportions are cooked with water for a specified length of time. In the distant past, every family prepares its own herbal needs for handling minor ailments. However, they would consult traditional medicine-men, who are famous for their knowledge in herbal medicine, to handle serious medical problems. Today, the traditional way of preparing herbal remedies in families have changed. The process has become commercialized. It is now common sight to see middle aged women carry a basin stacked full of different bottles of herbal remedies on their heads for sale.

Prepared herbal remedy is sold everywhere in Nsukka, but the motor-mechanic village and the Nsukka-motor parks are the usual hot-spots where herbal remedies sell freely. Using herbal remedy for healthcare needs should ordinarily not be

a problem. For instance, the World Health Organization supports the use of herbal remedy if they are proven to be safe (Falodun & Imieje, 2013). Although the safety measures of prepared herbal remedy leaves much to be desired (Oluwadiya & Adegoke, 2012), a more worrisome but subtle concern about the use of herbal remedy is the fact that many brands of herbal remedies, especially those sold at the motor-mechanic village in Nsukka are frequently soaked in alcohol or in distilled spirits. This implies that a sizeable proportion of alcohol is inadvertently consumed by people who use prepared herbal remedies. Oluwadiya and Adegoke (2012) argue that herbal remedies contain incredibly high alcohol content. They analyzed the alcohol concentration of some herbal remedies sold around Osogbo, South-Western, Nigeria and found that the samples contained as high as 21% alcohol by volume. A related study (Okafor, Alabi, Oke, Onwuamanam, & Emmanuel, 2019), revealed that some brews can have up to 40% alcohol by volume. Alcohol is poison. Obot (2006) argues that alcohol was responsible for contributing to about 60 disease categories; he asserts that "alcohol in all its forms is a commodity with high potential for negative health and social consequences" (p. 25). Again, if it is recognized that liver cirrhosis, a strong proxy for long-term health damage associated with alcohol is increasing among people who are drinking excessively (Jarl & Gerdtham, 2012), then regulating the use of herbal remedies brewed in alcohol should be a matter of necessity, not of choice.

The more alcoholic beverage taken into the body, the more injurious it becomes. In large quantities over a prolonged period, alcohol could cause insidious and

permanent damage to the brain and liver (Bushmen & Cooper, 1990). Studies on road rage and road accidents in Nigeria have reported that approximately 50 per cent of accidents on Nigerian roads are linked to alcohol use (Mefoh, Ugwu & Eze, 2018; Mefoh, Ugwu, Ugwu & Samuel, 2013; Welcome & Perverzev, 2010). Ejikeme (2004) has argued that even a moderate high intake of alcohol could inevitably lead to problems at workplace, such as luring people away from work and/or resulting in absolute tardiness. Frequent alcohol use leads to several problems like quarrelling, engaging in various risky behaviours and experiencing physical aggression (Tunwesigye & Kasirye, 2005). If alcohol induces such tendencies, herbal remedies brewed in alcohol should not be allowed to proliferate without regulations. The self-determination theory (SDT) (Deci & Ryan, 2012) provides the relevant framework for understanding the relationship between prepared herbal remedy and its use. The model indicates that people tend to have innate psychological needs that when fulfilled, have an effect on personal growth, psychosocial adjustment and wellbeing. It is highly probable therefore that many people who use herbal medicine do so for other reasons beyond the health care needs.

Over a dozen studies have examined the use of prepared herbal remedies in Nigeria (e.g., Akande, Adewoyin, Njoku, & Awosika, 2012; Falodun & Imieje, 2013, Oluwadiya & Adegoke, 2012; Okafor et al. 2019). Most of them stressed how unsafe herbal remedies are to public health, and some relate this to the issues of hygiene and fermentation of plant parts (e.g., Okafor et al. 2019). The present study views alcohol use as a problem, and sees it as the main driver for incessant use of

prepared herbal remedies by many adults. The present study has two objectives: first, was to investigate the prevalence of use of common variants of prepared herbal remedies among artisans; and the second was to inquire about the motives for use of prepared herbal remedies.

METHOD

Study 1

Participants

Ninety-four (94) artisans completed a measure used to examine the use of prepared herbal remedies. All the participants were males: 52 of them were single (55.32%), 36 were married (38.30%), 4 were widowed (4.26%) and 2 were divorced (2.13%). With regard to level of education: 33 completed primary school (35.11%), 47 completed secondary school (50.00%), and 14 completed tertiary school (14.89%). Their ages ranged between 17 and 52 years, with a mean age of 32.07 years and a standard deviation of 5.32. The artisans fell into the following distribution: Motor-mechanics 43 (45.74%), Panel-beaters 15 (15.96%), Welders 8 (8.51%), Auto-electricians 11 (11.70%), Nondescript artisans 17 (18.09%).

Measures

The questionnaire used in the study was adapted from the Psychoactive Substance Use Questionnaire (PSUQ) (Eze, 2006). The PSUQ is a 6-item measure of the frequency of psychoactive substance use. The instrument has a content validity and test-retest reliability index of 0.61. The adaptation was done by substituting the psychoactive substances on the PSUQ with seven variants of herbal remedies,

namely herbal remedies: for malaria, for typhoid fever, for clearing impurities, for dysentery, for body pain, for gonorrhoea, and for boasting sexual powers. As in the PSUQ, instruction on the adapted questionnaire requires a participant to give a rating between 0 and 4 to each of the herbal remedies according to the degree of their use of the herbal mixture. "never used it" (0), "have not used it more than two times" (1), "uses it less than three times in one week" (2), "uses it more than three times in one week" (3), and "used it frequently in the past" (4). Thus, the adapted questionnaire measures frequency of use of herbal remedies on a scale of four degrees: The questionnaire received an average score of 86% for content validity assessed by three judges and an internal consistency reliability index of 0.67.

Procedure, design and data analysis

Data were collected from artisans in their workshops. The researchers explained the purpose of the study to the workshop-owners; if a shop-owner expressed willingness to participate in the study, he signed the informed consent form. Permission to test an apprentice-artisan was given by both the apprentice's master and the apprentice himself. The researchers were standby to answer any participant's question relating to the questionnaire. The conduct of this research was approved by the Ethics Board, Department of Psychology, University of Nigeria, Nsukka. The design of the study was a cross-sectional research in which data were collected from participants once. Descriptive statistics was used to show prevalence of use of the various kinds of herbal remedies among the sample.

Study 2

Study area

The motor-mechanic village in Nsukka, which is also known as "site" by the inhabitants of the city, was the area covered in the study. The motor-mechanic village is a very expansive area, it is estimated to be occupying a land mass of about seven thousand square meters. Although Nsukka as a town has been described elsewhere as a slow-paced environment that is devoid of the usual hustle and bustle of fast-paced cities (Mefoh, 2007), the Nsukka motor-mechanic village is usually a cesspool of daily activities and noise. Aside the motor mechanic workshops and those of allied occupations, the motor-mechanic village is also where the building materials and the motor spare-parts markets of the town are located. These markets make the Nsukka mechanic village to bubble with activities beginning every Monday morning to Saturday evening. Consequently, the mechanic village has also become a good spot for petty businesses to thrive. Prominent among people who hawk things at the mechanic village are young girls and middle-aged women, who usually balance a bowl of prepared herbal mixtures on their heads and traverse the length and breadth of the mechanic village on daily basis to dispense some quantities of prepared herbal remedies to customers needing them.

Participants and interview

Twelve artisans participated in this qualitative research to examine why artisans use prepared herbal remedies. Because unobtrusive observation of participants is likely to reveal more natural behavior than one in which participants

are aware of being observed (Kantowitz, Roediger, & Elmes, 1994), unobtrusive observation was adopted to recruit only artisans who were observed using herbal mixture and/or seen chatting or exchanging pleasantries with the sellers of the herbal mixtures. Those were the inclusion criteria. Thus, selected artisans were people who have some knowledge about the use of prepared herbal remedies. Participants were interviewed individually, the interview guide was developed to understand participants' points of view on why they use prepared herbal remedies instead of orthodox medicines. The duration of interview was between 15-20 minutes per artisan. Data obtained from the interview were analyzed and summarized to illustrate respondents' perception on the objective of interest.

RESULTS

Study 1

The frequency of use of prepared herbal remedies by artisans in Nsukka motor-mechanic village is shown on Table 1. The herbal remedy for pain is the most widely used herbal mixtures among the seven variants examined in the study. Out of 94 artisans who responded to the questionnaire, 75 participants (i.e., 79.79%) said they had used the herbal remedy for pain. Only 19 participants (20.21%) reported that they never used the herbal mixture. The other six herbal remedies were also in popular use by the artisans. The percentage use of the various herbal remedies (arranged in their order of prevalence) includes: herbal remedy for clearing impurities 77.66%; herbal remedy for malaria 72.34%; herbal remedy for typhoid 67.02%; herbal remedy for

boasting sexual power 65.96%; herbal remedy for dysentery 50.00%; and herbal remedy for gonorrhoea 34.04%.

Study 2

Personal motivations for use of herbal medicine

Interviewees believe that prepared herbal remedies actually works. They argue that plants were created for man and were put to good use before the white-man's medicine came to the shores of Nigeria. Thus, the efficacy of herbal remedy is one of the major reasons why some artisans make use of herbal medicines. One motor mechanic (54 years old) said:

"Herbal remedy works better than orthodox medicine. My grandfather never took any 'Oyibo' (white man) medicine when he lived. I recalled as a young boy, when if anyone falls sick in our house, Akunne (that's my grandfather's name) would just cut some herbs from a nearby bush, cook them and gives the herbs to the person to drink. He usually drinks some himself and never falls sick. Akunne was very strong, he died at 96!"

Another artisan (a 43 year old Welder) has this to say:

"You cannot compare herbal remedy with Oyibo medicine. I hear that some Oyibo medicine for pains cause ulcer. That was the reason I even stopped using them. Before, I use 'diclofenac' brands, but not anymore. Prepared herbal medicine contains only natural ingredient, which has no artificial chemical and does not cause ulcer".

Table 1. Frequency of use of prepared herbal remedies

S/No	Degree of use of herbal remedies	Frequency	Per cent
1.	Herbal Remedy For Malaria		
	• Never used it	26	27.66
	• Have not used it more than two times	5	5.32
	• Uses it less than three times in one week	52	55.32
	• Uses it less more than 3 times in one week	8	8.51
	• Used it frequently in the past but has stopped	3	3.9
	• Total	94	100.0
2	Herbal Remedy For Typhoid Fever		
	• Never used it	31	32.98
	• Have not used it more than two times	14	14.89
	• Uses it less than 3 times in one week	36	38.30
	• Uses it more than 3 times in one week	3	3.19
	• Use it frequently in the past but has stopped	10	10.64
	• Total	94	100.0
3	Herbal Remedy For Cleaning Impurities (i.e., washing and setting)		
	• Never used it	21	22.34
	• Have not used it more than two times	26	27.66
	• Uses it less than 3 times in one week	15	15.96
	• Uses it more than 3 times in one week	26	27.66
	• Use it frequently in the past but has stopped	6	6.38
	• Total	94	100.0
4	Herbal Remedy For Dysentery		
	• Never used it	47	50.00
	• Have not used it more than two times	8	8.51
	• Uses it less than 3 times in one week	5	5.82
	• Uses it more than 3 times in one week	11	11.70
	• Use it frequently in the past but has stopped	23	24.47
	• Total	94	100.0
5	Herbal Remedy For Body Pain		
	• Have not used it more than two times	19	20.21
	• Uses it less than 3 times in one week	11	11.70
	• Uses it more than 3 times in one week	17	18.09
	• Used it frequently in the past but has stopped	47	50.00
	• Total	94	100.0
6	Herbal Remedy For Gonorrhoea		
	• Never used it	62	65.96
	• Have not used it more than two times	19	20.21
	• Uses it more than 3 times in one week	9	9.57
	• Used it frequently in the past but has stooped	4	4.26
	• Total	94	100.0
7	Herbal Remedy To Increase Sexual Potency (i.e., manpower)		
	• Never used it	32	34.04
	• Have not used it not more than two times	15	15.96
	• Uses it less than 3 times in one week	11	11.70
	• Uses it more than 3 times in one week	15	15.96
	• Uses it frequently in the past, but has stopped	21	22.34
	• Total	94	100.0

One Auto electrician (47 year old) who said he could not stop the use of herbal

mixtures pointed out that he is entrapped by it. He mentioned, "Washing and

Setting” and “Manpower” as his favourite herbal mixtures because these are soaked in strong alcohol. He said:

“Do not be deceived by all these testimonials that herbal medicine is this or that it is that. Those are all lies! All of us drink herbal mixtures because of its alcoholic concentration. People who still drink beer are people who are yet to discover the quality of herbal remedies. Beer only intoxicates; but “*agbo*” (street name for prepared herbal remedies) intoxicates, keeps one healthy, and is even cheaper than beer!”

Another Panel-beater (aged 26) added:

“Herbal medicine is very good, I take it every evening. I do hard work and any day I fail to take herbal medicine in the evening; I would wake up the next morning feeling too weak that I would not be strong for the day’s work.”

Social/economic motivations for use of herbal remedies

Based on World Bank report, the scores of artisans in Nsukka motor-mechanic village can be regarded as low-and-middle income people (Gindling & Newhouse, 2013). Typically, parts of the social reality that the poor in Nigeria face are poor access to public services and infrastructure, unsanitary environmental surroundings, poor health, insecurity and social exclusion. These features have become worse in this present time of economic downturn, when people’s purchasing power has been severely reduced. One respondent (28 years old Auto Electrician) puts it this way:

“I take herbal medicine once in a while. Although I know that there could be some problems associated with it, but under Buhari’s government, who has enough money to feed his family, talk less of making enough money to go to hospital?”

Another respondent (37 year old Vulcanizer) made a similar assertion. He said:

“Herbal medicine is working for me. I cannot remember the last time I went to see a doctor. I cannot even afford it, even if I want to go. My brother, this country is hard”

The interviewees also see orthodox medicine to be in somewhat of competition with herbal medicine. One 37 year old mechanic said:

“Herbal medicine is natural and there is no fear for overdose. Look at the Chinese; is it not herbal medicines that they use? Do they not look healthier and stronger than many Nigerians? Doctors in Nigeria usually complain that herbal medicines have no dose and they try to talk people out of its use. Rubbish! They are simply jealous. They know that many people who are patronizing herbal medicine were once their patients, and if care is not taking, they may lose them for good”

Some artisans complained about poor access to Medicare. They frown at certain bureaucracies in the hospitals, which make them pass through several harrowing experiences before a doctor could attend to their needs. One 35 year old panel beater complained that:

“The way people are treated in the hospital was what pushed me into taking herbal medicines in the first place. If one goes to the hospital, the individual will waste the whole day there. The nurses will attend to their friends and relatives first; thereby disregarding the order that patients come to the hospital. One spends unnecessarily long hours in the hospital! By the time the person returns back to the shed (workshop), all his customers would have gone elsewhere; and as you know, we do not earn salary like the office people.”

DISCUSSION

This study examined two objectives: the first was to describe the prevalence of use of prepared herbal remedy among artisans in Nsukka mechanic village; and the second was to determine why artisans use herbal mixtures (instead of orthodox medicines). In view of the first objective, descriptive analysis indicated that there is high use of prepared herbal remedies amongst the sample. More than half of the sample said they were either currently using one herbal remedy or another, or that they have used one sometime in the past. The only exception was the herbal remedy for the treatment of gonorrhoea, which sixty-two per cent of the sample claimed they had never used before. The high prevalence or high use of prepared herbal remedy among the sample is consistent with literature, especially local literature (Akande, et al. 2012; Okafor, et al. 2019; Oluwadiya & Akinola, 2012), which maintained that the use of herbal remedy in Nigeria is generally rampant. This finding suggests that too

many artisans are predisposed to using prepared herbal remedies. This may also be the trend in the general population, considering the ubiquity of middle-aged women hawking prepared herbal remedies in Nsukka town.

The second objective of the present research sought to determine why artisans use prepared herbal remedies. Data from the qualitative research yielded many varied responses, which were analyzed into themes to make sense of the interviewees' responses. The first theme relates to personal motivation. Many people use herbal remedies because it gives them fulfillment in terms of satisfying their needs for healthcare, while for some it satisfies their craving for alcohol. The other theme relates to social and/or economic motivation, which seems to suggest that artisans are drawn to herbal medicines due to poverty and poor treatment meted to them by hospital staff. The themes emanating from the responses of the respondents can be understood within the realm of the theory of self-determination (Deci & Ryan, 2000), which functions on the assumption that individuals are innately motivated towards growth and health.

The present study, like other previous studies (Akande, et al. 2012; Okafor, et al. 2019; Oluwadiya & Akinola, 2012), have shown that the use of prepared herbal remedies is pervasive among artisans, commercial drivers, civil servants and so on. Some notable factors sustaining the use of herbal remedies by artisans, many of whom belonged to the income group World Bank (1996) describes as the 'poorest of the poor', are: they believe that prepared herbal remedies works, that they provide a cheaper means of consuming alcohol, and more importantly,

they believe that prepared herbal remedies are cheaper than orthodox medicines. One important alluring factor which pushes artisans to use herbal remedy is its alcohol content. Most prepared herbal remedies are garnished in alcohol and many artisans drink them as a way to attain some levels of intoxication. Thematic analysis of interviewees responses show that aside alcohol, other factors which have helped prepared herbal remedies to stay in demand include: believe in the efficacy of herbal remedies, poverty, and poor attitude of health workers. The scourge of poverty is real in Nigeria (World Bank, 1996); since the reduction in international oil price, there has been a dramatic increase in the incidence and depth of poverty in the country. The economic situation inevitably influences the choices people make in terms of health-care needs.

Limitations and suggestions for future research

Although this study makes an important contribution to knowledge, the use of cross-sectional design, which allows data to be collected from participants only once, limits the explanatory power of the findings. Cross-sectional studies are economical with respect to time and resources, but they are also relatively simple (easy too) to provide robust evidence about the direction of cause and effect relationships. The researchers therefore, propose that future research on the use and/or motivation for use of prepared herbal remedies should adopt cross-lagged procedure, in which data are collected from participants over an extended period of time. This would help to establish the direction of cause and effect relationships between variables.

Conclusion and Recommendation

Every day, six days in a week, young-adult girls and middle-aged women hawk herbal remedies at the Nsukka motor-mechanic village. This observation led to the formulation of the two objectives examined in this research. The first objective was to determine the prevalence of use of prepared herbal remedy among Igbo artisans in Nsukka motor-mechanic village. That is, the study investigated whether the use of prepared herbal remedies was widespread among artisans or whether they are restricted to a specific few. The finding in respect to this objective revealed that the use of prepared herbal remedies was pervasive among the sample: all the variants of prepared herbal remedies were used by more than half of the artisans who participated in the study, with exception of the herbal remedy for gonorrhoea, which about thirty-four percent of the artisans have used. The second objective of the study was to determine why artisans use prepared herbal remedies instead of the readily available orthodox medicines. Analysis of interviewees' responses showed that craving for alcohol, poverty, believe in the efficacy of herbal remedies and ill-treatment of artisans by health workers were some of the factors why artisans prefer and use prepared herbal remedies.

This study began with the premise that prepared herbal remedies are soaked in alcohol, and like plain alcohol, may damage vital organs in the body and/or cause other psycho-social problems that might affect one's psychological wellbeing. Thus, the finding relating to craving for alcohol content in prepared herbal remedies appears interesting to the purpose of this study. Previous literature have shown that using alcohol encourage users to behave

aggressively and drive less courteously (Mefoh, et al. 2019; Mefoh, et al. 2013), lead to problems at workplace (Ejikeme, 2004), and was associated to engaging in risky behaviours and quarrelling (Tumwesigye & Kasirye, 2005). Following the social problems associated with alcohol use, the researchers recommend or call on public-spirited individuals and non-governmental organizations (NGOs) in and around Nsukka to organize psycho-educational programmes to educate artisans about the possible psycho-medical problems that are associated with frequent use of alcohol. And it really does not matter whether alcohol was taken in plain form or was taken by deception (i.e., mixed in herbal remedies), the toxic effect remains the same.

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