

Pattern of herbal medicine utilization among secondary school students

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Abstract

Background: The use of traditional herbs and remedies are relatively common and the understanding of the rationale for health choices among adolescent will enable health care practitioners to guide them in the selection of efficient and safe health care options. This study assessed the pattern of utilization of herbal concoctions among secondary students.

Methods: This is a descriptive cross sectional study of both junior secondary (JSS) and senior secondary (SSS) students were interviewed using a pretested semi- structured questionnaire.

Results: About half of the respondents were females 196 (50.3%) and the majority 252 (64.5%) of the students were 15 years and below. Most 352 (90%) of the respondents were aware of herbal drugs and the prevalence of herbal use is 88.1%. The most common source of herbal drugs 229 (74%) is the herbal drugs hawkers. The majority (53.4%) of the students who use herbal drugs used it to prevent illness. The main ailments for which herbal drugs were used were fever (85%) and hemorrhoids (13.1%). About a third 102(32.9%) combines

herbal drugs with orthodox drugs. The majority of the students who utilize herbal drugs 193 (62.3%) preferred it to orthodox drugs and 71(38.4%)of these students responded that herbal drug is more effective. There is no statistically significant association between age, gender of students, educational level of sponsor and utilization of herbal drugs($p>0.05$). However, there is a statistically significant association between ethnic group, religion and utilization of herbal drugs($p<0.05$).

Conclusion: Herbal drugs utilization among the students is very high and many of the students combine it with orthodox drugs. The school health programme should be strengthened and the students guided in the health care decision making process.

Keywords: Herbal medicines, Students, Utilization, Unorthodox medicines

Highland Med Res J 2014;14(2):76-79

Introduction

In Nigeria, scientific and herbal medicine exists side by side and are both patronized by health seekers¹. The combination of herbal drugs with conventional medicine raises the growing public health concern of potentially harmful interactions. Organ toxicity has been associated with various herbal preparations involving the liver, kidneys, and the heart. Some herbs may have carcinogenic properties².

Although several studies have been published concerning its use in adults, the use by children is less well known. Given the recent rise in popularity of herbal use, it seems likely that growing numbers of children would receive at least part of their health care through

these methods^{3,4}.

The adolescents begin to make important decisions related to their health, personal values and lifestyles. Through exposure to diverse ways of receiving treatment, they may decide to seek treatments that are unconventional. Knowing and understanding adolescents' views on health seeking solutions are essential for understanding the various factors influencing their health choices^{5,6}.

This study assessed the pattern of use of local herbal concoction among secondary school students. The understanding of the rationale for health choices among this group of young people will enable health care practitioners to guide them in selection of safe and efficient health care options. It can also provide the basis for health planning among health service providers.

Materials and Methods

Description of the study area

Apapa Local Government Area (LGA) is one of the 20 LGA in Lagos state and it has 12 State government schools. The United Christian Secondary school is one of the 12 State government schools in Apapa LGA and was founded in 1959. It has a total of 1878 students with 1133 junior secondary students and 745 senior secondary students.

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Study design and population

This descriptive cross sectional study was conducted among secondary school students. The calculated minimum sample size was 384 using the Kish formula for descriptive studies⁷

Sampling technique

A multi-stage sampling technique was used. The first stage involved the selection of The United Christian Secondary school using simple random sampling by balloting from the list of the 12 state government schools in Apapa LGA. The second stage involved the stratification of the students into JSS and SSS. Thereafter, the students were proportionately allocated into the two groups. In stage three, the students were further stratified into the various classes and were proportionately distributed into the various classes based on the number of students in each of the class. The respondents in the various classes were selected using simple random sampling by balloting.

Data collection

Data collection was carried out between April and May 2012. Four hundred pretested semi-structured questionnaires were distributed while 391 questionnaires were returned completed. The questionnaires had sections on knowledge, attitude and utilization of herbal medicines and were administered to students in the various classes with the assistance of their class teachers.

Data analysis

Data obtained was analyzed using Epi Info 2002 statistical software. The Chi-squared test was used to compare categorical variables. P less than 0.05 was considered significant.

Ethical considerations

The study was approved by the ethical committee of the Lagos University Teaching Hospital and informed written consent obtained from the participating students.

Results

Out of the 400 questionnaires that were distributed, 391 questionnaires were returned completed. Two- third 252(64.5%) of the students were 15 years and below, half were females 196 (50.3%) and majority were Christian 275 (70.2%). The highest proportion 173 (44.5%) of the students were Yoruba.

Most 352(90%) of the respondents were aware of herbal drugs. Most of the students use herbal drugs 310 (88.1%). The most common source of herbal drugs 229 (74%) is the herbal drug hawkers. Reasons for herbal drug use were preventive in 164 (53.4%) students, curative in 127 (41.4%) and social reasons in 12 (3.9%). The main ailment for which herbal drugs is used

was fever 260 (85%) and haemorrhoids 40 (13.1%). The types of herbal drugs usually taken were leaves by 176 (57.7%) students and roots by 86 (28.2%).

Table 1: Utilization, preference and combination of herbal drugs with orthodox medicine among secondary school students

Variables	Frequency	Percentage
Utilization of herbal drugs	310	88.1
Main Reason for taking Herbal Drugs		
To prevent illness	164	53.4
To treat illness	127	41.4
For social reasons	12	3.9
Ailments for which herbal drugs is used		
Fever	260	85.0
Haemorrhoids	40	13.1
Diarrhoea	4	1.3
Cough & catarrh	1	0.3
Type of Herbal drug usually taken		
Leaves	176	57.7
Barks	13	4.3
Roots	86	28.2
Stems	18	5.9
Others	12	3.9
Combine Herbal Drugs with Orthodox Drugs	102	32.9
Prefer Herbal Drugs to Orthodox Drugs	193	62.3
Reasons for their preference (n=193)		
Cheaper	35	18.9
More effective	71	38.4
Readily available	35	18.9
Convenience	42	22.7
Frequency of use		
Once daily	88	28.7
Twice daily	64	20.8
Thrice daily	30	9.8

About a third 102 (32.9%) of the students who use herbal drugs combined them with orthodox drugs. The main reasons for the combination were for quick results in 73 (74.5%). The majority of the students who use herbal drugs 193 (62.3%) preferred them to orthodox drugs. The reasons for such preference included efficacy (38.4%), convenience (22.7%) and affordability (18.9%).

The use of herbal medicine decreased with increasing age. More female students used herbal medicine when compared to their male counterparts. There was no association between age, sex of students and the use of herbal drugs. The utilization of herbal drugs was high among all the ethnic groups. The use of herbal drugs was high among both Christians (85%) and Muslims (96.2%). The association between religion, ethnic group and use of herbal drugs was found to be significant.

Table 2: Association between socio-demographic characteristics and use of herbal drugs among secondary school students

Variable	Use Herbal Drugs, n (%)			P value
	Yes	No	Total	
Age group				
10 - 15	206 (90)	23 (10.0)	229 (100)	0.124*
16 - 20	101 (84.9)	18 (15.1)	119 (100)	
>20	2 (66.7)	1 (33.3)	3 (100)	
Males	154 (85.6)	26 (14.4)	180 (100)	<0.001*
Religion				
Christianity	210 (85.0)	37 (15.0)	247 (100)	<0.001*
Islam	100 (96.2)	4 (3.8)	104 (100)	
Others	0 (0.0)	1 (100)	1 (100)	
Ethnicity				
Igbo	67 (84.8)	12 (15.2)	79 (100)	<0.001*
Yoruba	151 (98.7)	2 (1.3)	153 (100)	
Hausa	17 (89.5)	2 (10.5)	19 (100)	
Others	73 (74.5)	25 (25.5)	98 (100)	

* =Fisher's exact

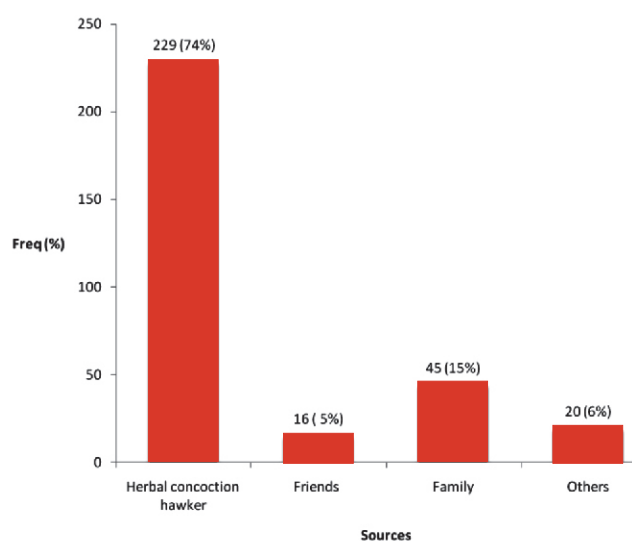


Figure 1: Sources of herbal drugs among secondary school students

Discussion

The majority of the students were 15 years old and below. Most of them were aware of herbal drugs and use them. The traditional drug hawker was the commonest source of traditional medicine among the respondents. The high level of utilisation of herbal drugs in this study may be due to several reasons which include the perception that herbal medicine is cheaper than orthodox medicine and

in some cases people hawk local herbal preparations increasing their accessibility and availability relative to orthodox health care services^{3,6}.

The prevention of illness was the commonest reason for the use of traditional herbs in this study with fever being the commonest indication. It has also been reported from previous studies that herbal drugs are popularly used for the treatment of malaria and complex health disorders like hypertension, diabetes, and hemorrhoids^{1,8}. In this study, about a third of the respondents used conventional and herbal concoctions concomitantly. The main reasons for the combination were quick result 73 (74.5%) and 22 (22.4%) of the respondents were advised to combine both. In Nigeria, orthodox and herbal medicine exists side by side and are both patronized by health seekers^{9,2}. Orthodox practitioners should bear in mind possible drug interactions and endeavour to ask about the use of herbal preparations while taking medical history from clients^{10,11}.

Herbal drugs were preferred to orthodox drugs by the majority of the respondents because it is readily available, perceived as cheaper and convenient in administration. Previous studies have also found similar reasons for large patronage of traditional healers which includes the fact that they provide immediate treatment, whereas conventional clinics may have lengthy waiting time and tests for eligibility before treatment³.

The age of the respondents and gender did not have a statistically significant association with the use of local herbal drugs. However, the association between religion, ethnicity and use of herbal drugs was statistically significant. Demographic variations associated with use of herbal medicine are at best conflicting^{12,13}.

In this study, herbal remedy appears to be strongly considered by the secondary school students for preventive and curative purposes. The conventional health care delivery system should be made more readily available and accessible to the vast majority of our people by the government. The possibility of organ toxicity with herbal drug use must be part of the enlightenment campaign.

Urgent steps should be taken to assess safety profile and efficacy of popular medicinal herbs^{14,15,16}. Secondary students should be guided in their health care decision making process and efforts should be made by the various stakeholders to strengthen the school health programme. Furthermore, legislative measures should be put in place to restrict indiscriminate advertisement of herbal concoctions to protect the population from misinformation by herbal practitioners.

Conflict of Interest

None declared in this work.

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