## **Original Article**

# Pattern and Awareness of Complementary and Alternative Medicine Usage for Otorhinolaryngological Problems Among Residents in Ekiti State

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### INTRODUCTION

Complementary and Alternative Medicines (CAM) are defined as medical and health care systems, practices, and products that are not currently considered an integral part of conventional medicine.<sup>[1]</sup> Complementary

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Background: The use of complementary and alternative medicine (CAM) in the treatment of various ailments globally has called for more research. Aim: This study aimed to draw the attention of the stakeholders to the prevalence, pattern and awareness of CAM usage in otorhinolaryngological ailments and the need to safeguard the health of CAM users in Ekiti state, south - west Nigeria. Patients and Methods: This is a cross sectional descriptive study carried out over a 12-month period (January to December, 2019) among consented patients that attended ear, nose, and Throat (ENT) clinics in two tertiary health institutions in Ekiti state. All the participants are aged 18 years and above. A self-administered semi structured questionnaire was used to collect data from our respondents. Results: A total of 148 respondents were analyzed comprising of 56 (37.8%) males and 92 (62.2%) females given a male to female ratio of 1:1.6. Their age ranged from 20–79 years with a mean of  $48.03 \pm 15.11$  SD. The highest response was in the age group 40-49 years representing 30.4% of the respondents. About half (51.4%) of our respondents were aware of the use of CAM for throat-related conditions. Few of the respondents (18.9%) are currently using CAM. About 33.1% of our respondents were satisfied with CAM. Only 4 (2.7%) of them experienced side effects to the use of CAM. For ear-related problems, Anointing/Olive (Olea europaea) oil was most commonly used in 34.5% of our respondents; Effinrin (Ocimum gratissimum), a local herb was commonly used in 29.7% for nose and local gin in 37.2% of our respondents for throat problems. Majority of them 44 (29.7%) got information about the various agents used through Vendors/traditional health practitioner. Conclusion: This study showed that the prevalent of CAM usage in ORL is quite low in our setting, which represent about one-fifth of the respondents. Although respondents claimed that the system was efficacious, awareness to its usage was very low and there was no evidence to prove that the diagnosis were known before using CAM. The use of Orthodox method in treating Otorhinolaryngological ailments is still the best. We therefore recommend empirical studies on CAM in future.

**Keywords:** Awareness, complementary and alternative medicine, otorhinolaryngological problem, pattern, usage

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and alternative medicine is now in common use globally and varies among populations.<sup>[2]</sup> In developed countries, more females than males use CAM in the general adult population and what is being used under the umbrella of CAM varies in form, number and ailment in different parts of the world.<sup>[3-5]</sup> A study done in the United States of America estimated that 30% to 50% of the general adult population of industrialized nations uses one form of CAM or another.<sup>[6]</sup> Studies of cancer patients in the industrialized world documented a 7-83% prevalence rate for the use of CAM.<sup>[7,8]</sup> Very few studies have described the use of CAM in developing countries. Singh, et al.<sup>[9]</sup> reported a prevalence of 38.5% among the general population of Indians living in Chatsworth, South Africa. There is little information with regards to use of CAM among Otorhinolaryngological patients. Considering the high utilization of CAM across Sub-Saharan Africa, it is necessary for policy decision makers, researchers and health professionals to recognize the existence of CAM usage among health-seeking of populations and develop an effective response that safeguards their health and well-being.<sup>[10]</sup> A proper policy and practice response to increasing CAM use requires an in-depth insight into the nature of CAM use, including the profile of CAM users as well as the drivers and barriers that facilitate and limit the use of CAM.<sup>[6]</sup> Some of the barriers are absence of conclusive scientific evidence that supports CAM practice, lack of patient belief in the safety and efficacy of CAM, perceived lack of an appropriate dose for CAM products and unhygienic practice in product preparation, perceived lack of education and training among CAM practitioners.[11-15] Many studies done in western countries have documented that CAM use is both very common and varies among populations.<sup>[6,12,16]</sup> Choice and type of CAM therapies vary, depending on age, level of income, level of education, and perceived cause and prognosis of the disease.[17] Also, the satisfaction derived from orthodox health care practices may influence potential choice of CAM. Thus, each country needs to determine the pattern and efficacy of CAM with a view to explore epidemiological data for necessary intervention. This study was therefore aimed at determining the prevalence, pattern and awareness of CAM usage for Otorhinolaryngological problems among residents in Ekiti State, South-Western, Nigeria.

#### Justification for the study

The use of alternative therapy for treating various ailments without proper consulting Physicians cannot be over emphasized. Information about the use of CAM for Otorhinolaryngological diseases are scanty. This type of study has not been done among residents in this environment/locality; it will therefore serve as a baseline for further studies.

#### Methodology

#### Study setting and study participants

This study was a cross sectional descriptive survey carried out within a period of 12 months between January and December 2019 among consented patients that attended ENT clinics in two tertiary health institution in Ekiti. All the participants are aged 18 years and above.

#### **Data collection**

A self-administered semi structured questionnaire which was pretested in ENT Clinic of another tertiary health institution in the south western part of Nigeria was used as the instrument of data collection from the respondents to ensure its validity and reliability.

Two research assistants were trained to facilitate administration and collection of the questionnaires in conjunction with researchers. This among others was to ensure the completeness of the questionnaires and to prevent unnecessary delay of patients in the clinic. Information about their bio data, awareness, types or forms of CAM products or agents used, source of information and usage of (CAM) as it relates to Otorhinolaryngological (ear, nose and throat) problems were sought. Reasons, perceived benefits and side effects associated with the use of CAM were also obtained.

**Inclusion criteria:** All adult clinic attendees that gave consent to participate in the study were examined.

#### **Ethical consideration**

Approval to carry out this study was obtained from the Human Research and Ethical Committee of the institution. Informed consent was sought from each respondent who consented to participate in the study after the study had been explained to them.

#### Data analysis

The data obtained was analyzed using IBM Statistical Package for Social Sciences (SPSS) version 20.0 software. (SPSS, IBM Corp, Armonk, NY, USA).

#### RESULTS

A total of 148 respondents were analyzed comprising of 56 (37.8%) males and 92 (62.2%) females given a male to female ratio of 1:1.6. Their age ranged from 20 to 79 years with a mean of  $48.03 \pm 15.11$  SD. The highest response was in the age group 40–49 years representing 30.4% of the respondents. Majority 82 (55.4%) had tertiary education while 16 (10.8%) had no formal education. Fifty-one (34.5%) of the respondents are civil servants followed by Business in 50 (33.8%). Large percentage (90.5%) practices Christianity. See Table 1. About half (51.4%) of our respondents had



awareness on CAM for throat-related conditions and only 23.0% of them ever used such medicine for throat conditions. Few of the respondents (18.9%) are currently using CAM. Overall, 42.6% of our respondents found that CAM was beneficial in ear, nose and throat problems. Palm oil was commonest agent found to be beneficial in overall. About 33.1% of our respondents satisfied with CAM. Only 4 (2.7%) of our respondents experienced side effects to the use of CAM [Table 2]. For ear-related problems, Anointing and Olive oil was most commonly used in 34.5% of our respondents; Effinrin (Ocimum gratissimum) a local herb in 29.7% was commonly used for nose and local gin in 37.2% of our respondents for throat problems. [This is shown in Table 3]. Majority of our respondents 44 (29.7%) got information about the various agents used through Vendors/traditional health practitioner [Figure 1].

The association between socio-demographic variables and use of CAM for ear-, nose-, and throat-related conditions are as shown in the Table 4. A statistically significant association was found with age and the use of traditional medicine for ear (P value 0.045); educational

Table 1: Socio-demographic characteristics of the respondents						
characteristics						
Age (years)						
20-29	13	8.8				
30-39	26	17.6				
40-49	45	30.4				
50-59	29	19.6				
≥60	35	23.6				
Mean±SD	48.03±15	.11				
Range	20-79					
Sex						
Male	56	37.8				
Female	92	62.2				
Educational level						
Nil	16	10.8				
Primary	22	14.9				
Secondary	28	18.9				
Tertiary	82	55.4				
Occupation						
Unemployed	6	4.1				
Students	6	4.1				
Farming	19	12.8				
Teaching	16	10.8				
Business	50	33.8				
Civil servant	51	34.5				
Religion						
Islam	12	8.1				
Christian	134	90.5				
Traditional	2	1.4				

level was also found to be significantly association with use for nose-related conditions while occupation was significantly associated with use for throat-related conditions (P values <0.001 and 0.012, respectively). None of the respondents who are less than 40 years have used it for ear and nose conditions while about a fourth (27.3%) of respondents with Primary education level have used it for nose-related conditions and about half of farmers use it for throat-related conditions.

In Table 5, the awareness of traditional medicine for ear conditions was found to be statistically significant with age, sex, educational level and religion of the respondents (P values <0.05). More than half of respondents whose age ranged between 40 and 49 as well as those with age range 50 - 59(55.6 and 55.2% respectively) are aware of traditional medicine for ear-related conditions. Furthermore, the awareness was found to be higher among males (57.1%) and those who practice traditional religion (100.0%). The awareness for nose conditions was significantly associated with educational level and religion (P value 0.006 and 0.020 respectively). For throat conditions on the other hand, a statistically significant association with awareness of traditional medicine was found with educational level and occupation (P value 0.006 and 0.043, respectively). More than two thirds of farmers were aware of traditional medicine for throat-related conditions.

#### DISCUSSION

Our study showed that about one-fifth of respondents are currently using CAM which is very low compared to other studies.<sup>[18,19]</sup> The high prevalence and increasing acceptance of CAM among Nigerians as recorded in other studies may not be unconnected to perceived side effects associated with the conventional therapy, patients with chronic complaints and the readily availability of CAM everywhere with poorly regulated marketing in our environment.<sup>[18,19]</sup> Some of them like Effinrin, Adin dudu, Dry gin, Alovera, Morringar and Palm oil are made locally and they are cheap. Female participants were found to





Table 2: Awareness and efficacy of use of traditional medicine for ear, nose and throat conditions			
Variable	Yes <i>n</i> (%)	No n (%)	
Awareness of any CAM for			
Ear-related conditions	65 (43.9)	83 (56.1)	
Nose-related conditions	51 (34.5)	97 (65.5)	
Throat-related conditions	76 (51.4)	72 (48.6)	
Ever used any CAM for			
Ear-related conditions	20 (13.5)	128 (86.5)	
Nose-related conditions	7 (4.7)	141 (95.3)	
Throat-related conditions	34 (23.0)	114 (77.0)	
Substances used for ear			
Currently using CAM remedy	28 (18.9)	120 (81.1)	
Found the CAM beneficial	63 (42.6)	85 (57.4)	
Efficacy of specific CAM found beneficial (n=72)			
Palm oil (Arecaceae/palmae) alone	11	17.5	
Honey (Apis mellifera)	9	14.3	
Dry gin (Juniperus communis)	8	12.7	
Efinrin (Ocimum gratissimum)	8	12.7	
Adin dudu/palm kernel oil (Elaies guineansis)	7	11.1	
Palm oil (Arecaceae/palmae) and sugar	6	9.5	
Herbal mixture (Achillea millefolium)	6	9.5	
Ginger (Zingiber officinalis)	6	9.5	
Garlic (Allium sativum)	3	4.8	
Snail water	2	3.2	
Palm oil (Arecaceae/palmae) and honey (Apis mellifera)	2	3.2	
Chinese medicine	2	3.2	
Bitter cola (Garcinia kola)	2	3.2	
Level of satisfaction with use			
Very satisfied	13	8.8	
Satisfied	49	33.1	
Disappointed	7	4.7	
Cannot tell any difference	79	53.4	
Ever experienced side effects from use			
Yes	4	2.7	
No	144	97.3	

Table 3: Pattern of Substances ever used by respondent's or their children for ear, nose and throat problems					
Variable	Frequency ( <i>n</i> =148)	Percent (%)			
Substance used for ear problems					
Honey (Apis mellifera)	47	31.8			
Garlic (Allium sativum)	16	10.8			
Hydrogen peroxide	26	17.6			
Anointing/Olive oil (Olea europaea)	51	34.5			
Supplement (Tiansi, Edmark, Alliance, GNLD, etc)	14	9.5			
Others (see foot note below)	10	6.8			
Substance used for nose problems					
Effinrin (Ocimum gratissimum)	44	29.7			
Supplement (Tiansi, Edmark, Alliance, GNLD, etc)	14	9.5			
Others (see foot note below)	12	8.1			
Substance used for throat problems					
Local gin	55	37.2			
Bitter cola (Garcinia kola heckle)	10	6.8			
Supplement (Tiansi, Edmark, Alliance, GNLD, etc)	2	1.4			
Speaking quietly into a hole in a mud wall	21	14.2			

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Table 3: Contd					
Variable	Frequency ( <i>n</i> =148)	Percent (%)			
Licking of palm oil put on door step	27	18.2			
Others (see foot note below)	6	4.1			
Substance used generally for ear, nose and throat problem					
Herbal mixture (Achillea millefolium)	29	19.6			
Herbal/Green tea (Camellia sinensis)	23	15.5			
Garlic (Allium sativum)	21	14.2			
Ginger (Zingiber officinalis)	29	19.6			
Alovera (Aloe barbadensis miller)	17	11.5			
Morringar seed (moringa oleifera)	23	15.5			
Chinese medicine	4	2.7			
Prayer faith healing	67	45.3			

Others for Ear: Snail water, Palm oil (Arecaceae/palmae), Adin dudu/palm kernel oil (Elaies guineansis). Others for Nose: Tobacco leaf (Nicotiana tabacum), Ori/Sheabutter (Vitellaria paradoxa), Ewe iju, Ewuro/bitter leaf (Vernonia amygdalina). Others for throat: Ira (Rauvolfia vomitoria), Igi Ahun

throat-related conditions										
Socio-demographic		Ear			Nose			Throat		
characteristics	Yes n (%)	No n (%)	Р	Yes <i>n</i> (%)	No n (%)	Р	Yes n (%)	No n (%)	Р	
Age (years)										
20-29	0 (0.0)	13 (100.0)	0.045*	0 (0.0)	13 (100.0)	0.609	2 (15.4)	11 (84.6)	0.305	
30-39	0 (0.0)	26 (100.0)		0 (0.0)	26 (100.0)		4 (15.4)	22 (84.6)		
40-49	8 (17.8)	37 (82.2)		2 (4.4)	43 (95.6)		8 (17.8)	37 (82.2)		
50-59	6 (20.7)	23 (79.3)		2 (6.9)	27 (93.1)		8 (27.6)	21 (72.4)		
≥60	6 (17.1)	29 (82.9)		3 (8.6)	32 (91.4)		12 (34.3)	23 (65.7)		
Sex										
Male	8 (14.3)	48 (85.7)	0.830	4 (7.1)	52 (92.9)	0.427	17 (30.4)	39 (69.6)	0.096	
Female	12 (13.0)	80 (87.0)		3 (3.3)	89 (96.7)		17 (18.5)	75 (81.5)		
Educational level										
Nil	0 (0.0)	16 (100.0)	0.204	0 (0.0)	16 (100.0)	< 0.001*	2 (12.5)	14 (87.5)	0.622	
Primary	4 (18.2)	18 (81.8)		6 (27.3)	16 (72.7)		6 (27.3)	16 (72.7)		
Secondary	2 (7.1)	26 (92.9)		0 (0.0)	28 (100.0)		8 (28.6)	20 (71.4)		
Tertiary	14 (17.1)	68 (82.9)		1 (1.2)	81 (98.8)		18 (22.0)	64 (78.0)		
Occupation										
Unemployed	0 (0.0)	6 (100.0)	0.186	0 (0.0)	6 (100.0)	0.081	0 (0.0)	6 (100.0)	0.012*	
Students	0 (0.0)	6 (100.0)		0 (0.0)	6 (100.0)		2 (33.3)	4 (66.7)		
Farming	6 (31.6)	13 (68.4)		4 (21.1)	15 (78.9)		9 (47.4)	10 (52.6)		
Teaching	2 (12.5)	14 (87.5)		0 (0.0)	16 (100.0)		4 (25.0)	12 (75.0)		
Business	4 (8.0)	46 (92.0)		2 (4.0)	48 (96.0)		5 (10.0)	45 (90.0)		
Civil servant	8 (15.7)	43 (84.3)		1 (2.0)	50 (98.0)		14 (27.5)	37 (72.5)		
Religion										
Islam	2 (16.7)	10 (83.3)	0.753	2 (16.7)	10 (83.3)	0.186	3 (25.0)	9 (75.0)	0.052	
Christian	18 (13.4)	116 (86.6)		5 (3.7)	129 (96.3)		29 (21.6)	105 (78.4)		
Traditional	0 (0.0)	2 (100.0)		0 (0.0)	2 (100.0)		2 (100.0)	0 (0.0)		

NB: Fisher's exact test was used to correct for Chi square test. Statistical significance was evaluated at (P<0.05) i.e \*Statistical significance was evaluated at the 0.05 level

have used CAM more than their male counterparts in this study. This is in agreement with findings from other studies where they recorded high prevalence of CAM usage among women.<sup>[20]</sup> Although our study was specifically done to evaluate CAM usage for Otorhinolaryngological problems, a study in Singapore, one of the developing

countries showed high percentage (58.6%) use of CAM among breast cancer patients.<sup>[21]</sup> In Nigeria, a study carried out in Enugu by Ezeome *et al.*,<sup>[17]</sup> recorded among cancer patients a prevalence rate of 65.0%. Worldwide the prevalence of CAM usage, though varies was averagely reported to be 31.4%.<sup>[19]</sup>

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throat-related conditions									
Socio-demographic		Ear			Nose			Throat	
characteristics	Yes <i>n</i> (%)	No n (%)	Р	Yes <i>n</i> (%)	No n (%)	Р	Yes <i>n</i> (%)	No n (%)	Р
Age (years)									
20-29	5 (38.5)	8 (61.5)	0.015	4 (30.8)	9 (69.2)	0.347	9 (69.2)	4 (30.8)	0.432
30-39	12 (46.2)	14 (53.8)		8 (30.8)	18 (69.2)		12 (46.2)	14 (53.8)	
40-49	25 (55.6)	20 (44.4)		20 (44.4)	25 (55.6)		26 (57.8)	19 (42.2)	
50-59	16 (55.2)	13 (44.8)		11 (37.9)	18 (62.1)		14 (48.3)	15 (51.7)	
≥60	7 (20.0)	28 (80.0)		8 (22.9)	27 (77.1)		15 (42.9)	20 (57.1)	
Sex									
Male	32 (57.1)	24 (42.9)	0.011	27 (48.2)	29 (51.8)	7.547	33 (58.9)	23 (41.1)	2.070
Female	33 (35.9)	59 (64.1)		24 (26.1)	68 (73.9)		43 (46.7)	49 (53.3)	
Educational level									
Nil	2 (12.5)	14 (87.5)	0.001	1 (6.2)	15 (93.8)	0.006	2 (12.5)	14 (87.5)	0.006
Primary	10 (45.5)	12 (54.5)		8 (36.4)	14 (63.6)		10 (45.5)	12 (54.5)	
Secondary	20 (71.4)	8 (28.6)		16 (57.1)	12 (42.9)		18 (64.3)	10 (35.7)	
Tertiary	33 (40.2)	49 (59.8)		26 (31.7)	56 (68.3)		46 (56.1)	36 (43.9)	
Occupation									
Unemployed	4 (66.7)	2 (33.3)	$0.124^{F}$	0 (0.0)	6 (100.0)	$0.078^{F}$	0 (0.0)	6 (100.0)	0.043 <sup>F</sup>
Students	0 (0.0)	6 (100.0)		0 (0.0)	6 (100.0)		2 (33.3)	4 (66.7)	
Farming	11 (57.9)	8 (42.1)		10 (52.6)	9 (47.4)		13 (68.4)	6 (31.6)	
Teaching	8 (50.0)	8 (50.0)		4 (25.0)	12 (75.0)		7 (43.8)	9 (56.2)	
Business	19 (38.0)	31 (62.0)		19 (38.0)	31 (62.0)		24 (48.0)	26 (52.0)	
Civil servant	23 (45.1)	28 (54.9)		18 (35.3)	33 (64.7)		30 (58.8)	21 (41.2)	
Religion									
Islam	10 (83.3)	2 (16.7)	$0.002^{F}$	7 (58.3)	5 (41.7)	0.020 <sup>F</sup>	8 (66.7)	4 (33.3)	0.250 <sup>F</sup>
Christian	53 (39.6)	81 (60.4)		42 (31.3)	92 (68.7)		66 (49.3)	68 (50.7)	
Traditional	2 (100.0)	0 (0.0)		2 (100.0)	0 (0.0)		2 (100.0)	0 (0.0)	

Table 5: Association between socio-demographic variables and awareness of traditional medicine for ear-, nose-, a	and
throat-related conditions	

NB: Fisher's exact test was used to correct for Chi square test

Our study revealed various substances and pattern of their usage by our respondents. It was observed that Olive oil (Olea europaea) and honey (Apis mellifera) were the commonest substances used for ear problems like wax impaction, tinnitus, ear ache. This may be as a result of their familiarity; availability and they were known to perform various functions. The olive oil (Olea europaea) apart from it uses as a cerumenolytic agent; it was also used popularly as an anointing oil during prayers and fasting for spiritual purposes. Honey (Apis mellifera) on the other hand has a lot of medicinal uses, but mainly used for ear ache. It is important to mention that some of our respondents applied hydrogen peroxide into the external auditory canal for various reasons which were not limited to noise in the ear (tinnitus), ear ache and ear discharge as in otitis external and media. Most of these treatments are done on self-medication basis without prior consulting an ENT specialist. In general, hydrogen peroxide has a good safety profile if used properly and at low concentrations.<sup>[21]</sup> Most over-the-counter (OTC) hydrogen peroxide solutions contain purified water and 3% hydrogen peroxide. When used, it can cause skin irritation, blistering and in severe cases it can even cause burns at concentrations over 10%. It should not be

used in the ear in the presence of infection and tympanic membrane perforation.<sup>[21]</sup>

The most commonly used CAM for nose problem is Efinrin as in Epistaxis. The English name is Clove Basil while the Local names are Nchuawun (Igbo), Efinrin (Yoruba), Daidoya (Hausa), Ntong (Efik), Aramogbo (Edo), Scent Leaves. Botanical Name: Ocimum gratissimum. It was used in controlling epistaxis among other things.

For the throat problems like Tonsillitis, uvulitis (Belulelu), the substances that were commonly used from this study are dry gin (Juniperus communis), palm oil (Arecaceae/palmae) and bitter cola (Garcinia kola). Dry gin was thought to shrink any inflamed tissue especially when there is acute sore throat. Palm oil and bitter cola was used for various throat problems and cough.

Our study showed a statistically significant association between socio-demographic variables and use of CAM with age, educational level and occupation to ear, nose and throat problems. Data showed that respondents below the age of 39 years hardly use CAM for ear

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and nose problems. The study also showed that our participants who does not have formal education and were unemployed did not use CAM for nose and throat problem. This might be due to the fact that they have no information about the agents because of their illiteracy level or lack of job which might have caused them financial handicapped. These findings however differ from report of study conducted by Busari et al.<sup>[22]</sup> in Ido Ekiti, Nigeria and Onylapat et al.<sup>[23]</sup> where those with post-secondary education were more likely to use CAM than those with lower and no formal education. Although both studies were hospital based, our own study was specifically on Otorhinolaryngological diseases unlike the study by Busari et al.[22] that was conducted at GOPD where a variety of health conditions like fever, headache, pains and diseases like hypertension and diabetes mellitus are treated. Awareness to CAM usage for Otorhinolaryngological conditions was very low. Only 33.1% of our participants were satisfied with the use of CAM unlike the reported cases of 40% and 45% by Busari<sup>[22]</sup> and Waterbrook et al.<sup>[24]</sup> respectively. Only 2.7% of those that uses CAM claimed to have noticed side effects. Majority (31.1%) of our respondents received information about CAM through vendors and traditional health practitioners. Others got theirs through their family members and friends.

This study also showed a statistically significant association of the awareness of people with usage of CAM as related to age, sex, educational level and religion. More than half of respondents whose age ranged between 40 - 59 years are aware of CAM for ear-related conditions. Also, male respondents and traditional religions have awareness for ear-related problems. The awareness for nose conditions was significantly associated with educational level and religion. The awareness was poor for those that do not have formal education. For throat conditions on the other hand, a statistically significant association with awareness of CAM occurs with educational level and occupation. Those that had no job and also no formal education were not aware of CAM usage.

A unique finding in the use of CAM in this study was that, symptoms are treated rather than disease because diagnosis were not known. Most of the diseases that resolved may have resolved because they were self-limiting.

#### Limitation

Majority of the respondents did not know the diagnosis hence could not ascertain the efficacy of the CAM. Also, the study did not explore the reasons for preference of CAM to orthodox healthcare.

#### CONCLUSION

This study showed that the prevalent of CAM usage in ORL is quite low in our setting, which represent about one-fifth of the respondents. Although respondents claimed that the system was efficacious, awareness to its usage was very low and there was no evidence to prove that the diagnosis were known before using CAM. The use of Orthodox method in treating Otorhinolaryngological ailments is still the best. We therefore recommend empirical studies on CAM in future.

#### **Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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#### **Conflicts of interest**

There are no conflicts of interest.

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