

We love orthodox medicine but still use our ‘Elewe omo’: Utilization of traditional healers among women in an urban community in Nigeria

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ABSTRACT

Background: Traditional Medicine refers to knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures. Women have been reported to utilize orthodox health care facilities more hence this study in an urban center. **Objective:** To determine the utilization of traditional healers, preference of healthcare and co-utilization of traditional and orthodox medicine among women in an urban community in Lagos, Nigeria. **Method:** A cross sectional design using a multistage sampling to select 270 women in Mosan Okunola, Lagos, Nigeria in 2019. A pretested semi-structured interviewer-administered questionnaire and an in-depth interview were used to obtain data from participants. Utilization of traditional healers was referenced within the last 12 months. **Result:** Sixty three percent (63.2%) of the study population utilized traditional healers and 80.6% of respondents that accessed healthcare utilized traditional healers. The Traditional Medicine ingredient dealer was the most patronized (74.6% of respondents). Eighty three percent (83.3%) of study participants indicated preference for orthodox medicine and 53.1% of the study respondents co-utilized both traditional healers and orthodox medicine. Concurrent use of both traditional and orthodox medicine was not a common practice among the women. Level of education, monthly income and means of payment for treatment had a statistical significant association ($P < 0.05$) with utilization of traditional healers but means of payment for treatment was the singular predictive factor of utilization of traditional healers. **Conclusion:** Utilization of traditional healers among women in this community was high with majority indicating a preference for orthodox medicine. It is recommended that an in-depth history of remedies used by patients should be delved into by orthodox health practitioners.

Keywords: Co-utilization, elewe omo, preference of healthcare, utilization of traditional healers Nigeria

Introduction

The practice of traditional healers is still found to be used in modern times as some studies have reported the persistence of traditional healers and utilization of these healers in traditional communities (especially in Africa and multicultural settings among immigrants in the United States of America).^[1,2] Traditional Medicine (TM) refers to knowledge, skills and practices based

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on the theories, beliefs and experiences indigenous to different cultures.^[3] The practitioners of Traditional Medicine are referred to as Traditional healers (TH) and they have been classified and described by various authors as a heterogeneous group.^[4-6] These traditional healers have been involved in treatment of psychiatric cases, provision of delivery services to pregnant women, treatment of epilepsy, bone setting, treatment of other ailments such as fever, cancers and other health conditions. On the other hand, Orthodox medicine (OM) is a system in which medical doctors and other healthcare professionals (such as nurses, pharmacists, and therapists) treat symptoms and diseases using drugs, surgery or radiation. It is also referred to as mainstream medicine, biomedicine, allopathic medicine, Western medicine or conventional medicine.^[7]

In Africa, there is wide acceptance of TM and it has been difficult abandoning reliance on TM and other practices.^[8,9] The appeal for TH is premised on their ability to understand patients' ailments and experience within a cultural construct.^[10] In most African countries however, TM and OM do not work together and as such, individuals with ailments usually have to choose from the available two options of care.^[9,11]

It is estimated that about 80% of people in developing countries utilize traditional healers.^[12] A study in the United States reported 42% of elderly Korean population to be using traditional healers,^[13] while another study in Ethiopia estimated 52% of those attending traditional healers' clinic in Addis Ababa, to have claimed to use traditional healers as their first choice in health care.^[2]

Simultaneous use of both traditional healers and orthodox medicine for same condition has been documented.^[14,15] A systematic review emphasized that herbal medicines contain active ingredients and these may interfere with prescribed drugs.^[16] The drug interactions that could result from simultaneous use of drugs from orthodox medicine and remedies from traditional healers would vary depending on the active substances in them. The interactions would either result in decreasing the action of one of the two drugs thereby reducing its effects or increasing the action of one of the two drugs which in turn increases side effects of such.

In Mozambique, as high as 62% of patients visiting HIV clinic had indicated use of a traditional healer before consulting at the clinic.^[17] Where Traditional healers were used as the first option, it caused delay in accessing health care in HIV cases which in turn resulted in more profound symptoms and increased viral load of patients.^[17] A study in Guinea^[18] also showed evidence that individuals with epilepsy had been seeking care from TH for more than 3 years before presenting at the health facility.

Some researchers^[1] have reported conflicting advice from traditional healers and the physicians and the patients' willingness to adhere more to the advice from the traditional healer. Conflicting advice has its own inherent danger as it leaves the

individual confused and may worsen the condition or even result in death in such individuals. Traditional healers in some cases were seen as advising patients not to disclose to their doctors what they are being given.^[19] Ninety three percent (93%) of study participants who had used traditional medicine in the treatment of HIV in a Ghanaian study did not disclose to their doctors.^[20]

Women have been reported to utilize orthodox health care facilities more,^[21,22] hence the essence of this study among this group. This study aimed to determine utilization of Traditional healers, preference of health care and co-utilization of traditional healers with orthodox medicine among women in Mosan Okunola community in Lagos state. This will provide primary care physicians (the practitioners of OM) within this setting the knowledge of what obtains amongst this group to enable physicians bear in mind these dimensions while providing care.

Materials and Methods

Ethical considerations

Ethical approval for the study was obtained from the Health Research and Ethics Committee of the Lagos State University Teaching Hospital (LASUTH) with approval number LREC/06/10/1254. Permission to carry out study was also granted by the Medical officer of Health of the Local Council Development Areas (LCDA). Participation in the study was voluntary and study participants were well informed about the purpose of the study, data collection procedures and right to withdrawal from study at any time. A verbal and written consent by signature was obtained from participants and a thumb print in situations where participants could not sign. Confidentiality was maintained while collecting data and names or other parameters that could disclose identity of participants were not indicated on the questionnaire.

Study design and setting

A descriptive cross sectional community based study carried out in Mosan-Okunola community of Lagos state, Nigeria. Lagos State is regarded as the economic nerve center of Nigeria and located in the south western part of the country; the State has a population of about 18 million and it is urban in nature. Mosan-Okunola is one of 37 LCDA in Lagos State and the community is urban. Mosan-Okunola LCDA has 10 clusters used by the health authorities for health programs.

Study population

The study population was women that had ever been pregnant.

Sample size determination and sampling technique

A minimum sample size of 162 was calculated using Fisher's formula for sample size estimation. A type 1 error rate of 5% and 12% prevalence^[23] of utilization of Traditional healers was used.

A multistage sampling technique was used to recruit participants for the study. In the first stage, simple random sampling by

balloting was used to select four clusters from the ten clusters. The second stage was selection of streets; five streets were selected by balloting from each of the selected cluster and the streets in the area formed the sampling frame for the study. In the third stage, 14 houses were selected from each street by systematic random sampling using a sampling interval of three. A participant was selected from each selected house and where more than one eligible participant was present in a house, a participant was selected by balloting.

Eligibility criteria

Eligibility criterion was permanent residence in the area for minimum of six months. Women who were not present at the time of study and those unwilling to participate were excluded from the study.

Data collection

Data were collected by mixed methods (qualitative and quantitative methods).

Qualitative data

The qualitative data were collected by individual interviews of respondents using an In-depth interview guide (IDI guide). This was conducted solely by the researcher and 18 respondents were interviewed (when saturation was attained: until no new information was obtained; when responses became repetitive from the respondents). The interviews were face-to-face with individual respondent and interviewer being the only ones present in places they considered comfortable and conducive in their home environment. Six of the participants for the IDI were identified by the Medical officer of Health (MOH) for the LCDA while the other participants were women that volunteered to be part of the interview. Each in-depth interview lasted 30 minutes to one hour and was audio recorded with important points noted in writing by the researcher. The interviews were conducted ahead of the quantitative data and information obtained from the interviews were used to enrich the questionnaire used for the study.

Quantitative data

Quantitative data were collected by the researcher and seven trained research assistants who were semi-final year medical students (three weeks after the In-depth interviews were conducted). Instrument used was an interviewer administered structured questionnaire which was pretested among thirty respondents in another community of Lagos (Shomolu).

Data management and analysis

Two hundred and seventy (270) women were recruited into the study out of which 250 questionnaires were completed and analyzed.

Interviews were transcribed and qualitative data analysis was done by content analysis into thematic areas.

The quantitative data analysis was done by SPSS version 20. Univariate analysis was used to generate frequencies and

percentages, Chi-square was used to test for association between variables (level of significance was at $P < 0.05$) and regression was used to predict utilization of traditional healers. Traditional healers were grouped as herbalist, Traditional birth attendants (TBA), Traditional surgeons, Traditional medicinal ingredient dealers (also known as *elewe omo*) and traditional psychiatrist.^[6] A respondent was categorized as using orthodox medicine if respondent had used the hospital or chemist. A respondent was categorized as using Traditional healer if she had made a consultation with one or had bought herbs from any seller. Use of herbs plucked by self (without consultation) and herbs brought by relatives or friends was not categorized as use of Traditional healers. Utilization of a traditional healer was referenced within the last 12 months.

Prevalence of utilization of Traditional Healers among sampled population was calculated using:

$$\frac{\text{No of those who had used TH}}{\text{Total sample size used for study}} \times 100$$

Prevalence of utilization of Traditional Healers among women who had need to access healthcare was calculated using:

$$\frac{\text{No of those who had used TH}}{\text{No of women that had need to access healthcare}} \times 100$$

Study duration

Data was collected over a period of two months and study duration was seven months.

Results

Qualitative

Utilization of traditional healers

Four of the interviewees had never at any time utilized traditional healers or herbs and 11 interviewees had used a traditional healer. However, some of the respondents did not categorize a Traditional medicine ingredient dealer as a traditional healer. Two of interviewees had used a Traditional birth attendant though none had visited the herbalist or traditional surgeon.

Respondent 9: "I have not used Traditional healer in the last 12 months but I buy herbs from the sellers."

"I buy herbs from the herb sellers. They usually come from Abeokuta to sell herbs somewhere in this area. They come twice a week".-respondent 2

"I go to some of these *elewe omo*, not *babalawo* or *oloogun o*. God will not let me see condition that will take me there. But those *elewe omo* know what to recommend when I go there."-respondent 5

Seven of the eighteen interviewees purchased herbs (in form of plant leaves or stems, barks of trees), stones, powder, some substances extracted from some animals, already prepared concoction, substances dissolved in some alcoholic solvents from traditional healers while some others had to purchase some additional ingredients such as pap water, gin, 7 up, camphor in addition to what was purchased or given by the traditional healer

Preference of health care

The IDI revealed that 6 of the 18 respondents interviewed indicated preference to go to chemist to buy drugs, while 4 respondents preferred to consult at the hospital. Only 3 of those interviewed indicated preference for the traditional healers while 3 opted for self-medication and 2 interviewees would make herbs by self. One of the respondents said:

Respondent 18: “I prefer to go to the hospital. But will still use herbs after the hospital treatment; I trust the hospital and I also trust the herbs. When I go to the hospital, they will diagnose me well and after that I can take herbs; but I would have known what they say is wrong with me. It will even help me when I visit where I buy the herbs”.

“When I am ill and not feeling fine, I will make herbs by myself. I know the plants to use because since I was young about 8 years old, my mother has been sending me to pluck or buy and she makes it. I know how to make the agbo by myself. Usually, when I use it, I am better and that is all”- respondent 16.

“I buy herbs from these sellers every now and then. That is what I usually do. But now that I am pregnant, I can’t use anything anyhow, so I go to the hospital”.-respondent 1

“I always go to that chemist over there first. If I don’t feel better, I will go to the hospital and that is how it has been with me”. I am not used to these herbs because I am not sure of what it contains or the dose; what if it harms some of my internal organs? It is better I use drugs or visit hospital; I don’t go anywhere else for my health”.-respondent 4.

Co-utilization of orthodox and traditional healers

A respondent said:

“I use herbs first; then use drugs some days later if I’m not better. But I don’t use the two together at the same time. As far as I am concerned, the two of them are the same and they work, it is for us to get better. Just that I am more used to the herbs and it is more convenient instead of going to the hospital to queue to see a doctor or *pay thousands* to buy drugs at chemist. But like I said, not that I don’t use tablets o, if the herbs don’t work, I will go to the hospital”.-respondent 2

Respondent 3

“I usually buy drugs from the chemist most of the time and I feel better most of the time. But I used herb within the last 12 months

when I didn’t feel better after using the drugs I bought from the chemist. I didn’t use both herbs and drugs bought together”.

Quantitative

The response rate in the study was 92.6%. Majority of the respondents (65.2%) was less than 40 years old and age range was 22–69 years (mean age was 37.0 years). Majority of respondents (78.8%) had a minimum of secondary education and majority (48.0%) was self-employed. Only 12.4% of the respondents earned above N50,000 as monthly income and only 13.6% had a form of health insurance [Table 1].

The most patronized traditional healer was Traditional medicine Ingredient dealer as indicated by 74.6% of respondents, while

Table 1: Socio-demographic and socio-economic characteristics of Respondents

	Frequency (n=250)	Percentage
Age Group		
20-29 years	68	26.8
30-39 years	96	38.4
40-49 years	43	17.2
50-59 years	31	12.4
60 years and above	12	4.8
Mean: 37.02; S.D.: 10.66; Minimum: 22; Maximum: 69		
Marital status		
Single	11	4.4
Married	219	87.6
Widow	17	6.8
Divorced	3	1.2
Religion		
Christianity	162	64.8
Islam	82	32.8
Traditional	6	2.4
Ethnic group		
Hausa	4	1.6
Igbo	40	16.0
Yoruba	170	68.0
Others	36	14.4
Level of education completed		
None	16	6.4
Primary	37	14.8
Secondary	117	46.8
Post-secondary	80	32.0
Employment status		
Employed in formal sector	20	8.0
Employed in informal sector	94	37.6
Self employed	120	48.0
Not employed	16	6.4
Monthly income		
<20,000	78	31.2
20,000-50,000	141	56.4
51,000-100,000	18	7.2
101,000-150,000	8	3.2
151,000 and more	5	2.0
Health insurance		
Yes	34	13.6
No	216	86.4

19.5% consulted with herbalist and 5.9% with Traditional birth Attendants (TBAs) in the past 12 months. Over 50% of respondents (54.2%) indicated relatives as their source of information about the traditional healer utilized while 33.1%, 7.6% and 3.4% respectively had indicated friend, previous use for an ailment and referral from health center as their sources of information.

One hundred and ninety six of respondents (78.4%) had a need to access healthcare in the past 12 months and 47.2% had indicated use of a traditional healer. In all, 158 of the respondents (85.0%) had made some form of consultations with a type of traditional healer (those that bought herbs in addition to those that got herbs from TBA/herbalist) [Table 2].

Table 2: Utilization of traditional healers and preference

	Frequency	Percent
	(n=250)	
Ever used a traditional healer in the past 12 months		
Yes	118	47.2
No	132	52.8
Need to access healthcare in the past 12 months		
Yes	196	78.4
No	54	21.6
Ever referred someone to a traditional healer in the past 12 months		
Yes	101	40.4
No	149	59.6
Use of a traditional birth attendant in last delivery/ most recent pregnancy (in the past 12 months)		
Yes	41	16.4
No	209	83.6
Ever used herbal medicine in the past 12 months		
Yes	186	74.4
No	64	25.6
How the herb used was obtained (n=186)		
Bought herbs	138	74.2
From TBA/herbalist	20	10.8
Plucked herbs by self	15	8.0
Given to me by a friend/relative	13	7.0
Preference of health care		
Hospital	180	72.0
Chemist	28	11.2
Traditional healers	22	8.8
Buy herbs	13	5.2
Self-medication	7	2.8
First point of call in last illness		
Hospital	166	66.4
Chemist	29	11.6
Traditional healers	24	9.6
Buy herbs	15	6.0
Make herbs by self	12	4.8
Use drugs by self	4	1.6
Decision on where health care is obtained		
Self	149	59.6
Husband	93	37.2
Others (Parents/friends)	8	3.2

Prevalence of utilization of Traditional healers among the sampled population (in the last 12 months) was 63.2% and prevalence of utilization of Traditional healers among women having need to access healthcare in the past 12 months was 80.6%.

Eighty three percent of the respondents (83.2%) had indicated either the hospital or chemists as their preference of health care and 78.0% had reported using orthodox medicine as their first point of call in last illness. Majority of the respondents made a self-decision as to where they accessed healthcare [Table 2].

About half of the respondents (53.1%) that had need for healthcare had indicated co-utilization of orthodox and traditional treatment in same illness in the past 12 months. Majority of those that co-utilized (56.7%) reported use of Traditional healers was after consulting at the hospital [Table 3].

For respondents that co-utilized both Traditional healers and orthodox medicine, reasons varied as shown in Table 3. These reasons were corroborated by responses from the IDI.

There was a statistically significant association between level of education, monthly income, who paid for treatment and utilization of traditional healer ($P < 0.05$; Table 4). The multivariate analysis using logistic regression showed means of payment for treatment as a predictor of utilization of traditional healers [Table 5].

Discussion

The prevalence of utilization of Traditional healers among the study population was high (63.2%) and this is comparable with 66.8% reported in a previous study carried out in Lagos.^[24] However, a study Osun state, Nigeria^[25] reported lower figures (54% of respondents utilized a form of traditional healer in the past 12 months). Finding in South Africa^[15] reported by far lower prevalence (1.2%) compared to prevalence in this study; this can be attributed to the duration used in the study. The South African study considered those that had used traditional healers within the past one month as compared to this study which considered use of traditional healers within the past 12 months. The one month period may not have provided a health need in many individuals thereby giving a misleading impression for our study that traditional healers were not used. In this study, among persons that needed to access healthcare in the past 12 months, the prevalence of utilization of traditional healers was 80.6% which was also at variance with 3.3% reported in South Africa^[15] which considered a one month period. A small proportion of the respondents in this study (3.4%) had indicated their source of information about the traditional healer was from the health center which was an unexpected finding in this study as the traditional medicine is not integrated into the orthodox medicine in Lagos.

The preference for healthcare among majority of the respondents (83.2%) was orthodox medicine [Table 2] though

Table 3: Co-utilization of traditional healers with orthodox medicine

Variable	Frequency	Percent
Action taken in the last condition you needed to access healthcare within the last 12 months (n=196)		
Used drugs and also herbs/remedies from traditional healers	104	53.1
Used only drugs and advice from hospital/chemist	63	32.1
Used only herbs from friends/relatives/dealers	25	12.8
Used only remedies from traditional healers	4	2.0
Point at which traditional healer was consulted (n=104)		
Before going to the hospital	45	43.3
After going to the hospital	59	56.7
Reasons for co-utilization of Traditional healers with Orthodox medicine** (n=104)		
When symptoms persist	4	3.8
If one does not work, the other will work	17	16.3
Use of orthodox drugs push out the symptoms but herbs gives total cure	28	23.1
Increase effectiveness	33	31.7
Using one method does not hinder use of the other	67	64.4

Table 4: Association between socio-economic variables and utilization of traditional healers

Variable	Utilization of Traditional healers		χ^2	df	P
	Yes	No			
Education					
No formal	13 (81.3%)	3 (18.7%)	8.5	3	*0.042
Primary	18 (62.1%)	11 (37.9%)			
Secondary	88 (86.3%)	14 (13.7%)			
Tertiary	39 (79.6%)	10 (20.4%)			
Total	158 (80.6%)	38 (19.4%)			
Monthly Income					
≤50,000	141 (82.9%)	29 (17.1%)	4.5	1	0.045
>50,000	17 (65.4%)	9 (34.6%)			
Total	158 (81.7%)	38 (18.3%)			
Means of Payment for treatment					
Self	67 (74.4%)	23 (25.6%)	11.7	3	*0.004
Husband	74 (91.4%)	7 (8.6%)			
Employer	2 (50.0%)	2 (50.00%)			
Others	15 (71.4%)	6 (28.6%)			
Total	158 (80.6%)	38 (19.4%)			

*Fishers exact

there was still a high utilization of herbs and traditional medicine among same respondents. Similar findings were reported in previous studies in Nigeria (south west^[25] and south eastern^[26] part) as well as Ghana.^[27] This may be indicative of other factors responsible for utilization of TH. This finding is further buttressed by the qualitative finding that most of the respondents indicated orthodox medicine as their preferred option of care as respondents reported that they would prefer to use the hospital in order to make a diagnosis, but they still resorted to traditional healers and herbs. It is also suggestive that use of herbs was entrenched into the culture and part of upbringing. A recurring finding from the IDI and quantitative data was that some respondents did not categorize purchasing herbs from Traditional medicine Ingredient dealer as use of Traditional healers. The finding in this study is at variance with another study that examined preference for treatment of mental illness in Osun state, Nigeria.^[28] There is a possibility that the preference of healthcare may also be condition specific as corroborated by a study in Abeokuta^[29] which reported women preferring the

hospitals but would use TBAs or Primary health care centers for maternity cases. This present study however did not focus on the specific conditions and their preferences. The earlier study in South eastern Nigeria,^[26] reported similar finding and even higher proportion of respondents (92.9%) indicating the hospital, chemist or laboratories as their first point of call when ill. However, contrary finding was reported in Addis Ababa^[2] as Traditional healers were the first choice and point of call for more than half (56.2%) of study participants. This is more likely to be due to reasons that the study participants were recruited from traditional healers' clinics as compared to a study carried out in the community.

Co-utilization of both orthodox and traditional medicine was found in this study and similar to findings in previous studies in Nigeria^[26] (among 63.7% of study participants) and qualitative studies in Nigeria,^[30] Cameroon^[31] and Malaysia.^[19] Majority of the respondents in this present study that co-utilized, used herbs or consulted with traditional healers after they visited the

Table 5: Regression model for utilization of traditional healers

	B	S.E.	Exp (B)	95%C.I	
				Lower	Upper
Monthly income					
<50,000 (ref. category)	–	–	1.0		
50,000 and above	-0.682	0.618	0.506	0.151	1.698
Level of education					
None (ref. category)	–	–	1.0		
Primary education	-1.586	0.900	0.205	0.035	1.194
Secondary education	0.085	0.854	1.089	0.204	5.805
Tertiary education	-0.254	0.891	0.775	0.135	4.449
Means of payment for treatment					
Self (ref. category)	–	–	1.0		
Husband	-0.696	0.531	2.005	1.708	5.678
Employer	20.557	2.842	8.422	0.000	
Others	0.022	0.688	1.023	0.266	3.935
Constant	1.582	0.779	4.863		
Model X ² (P)	15.904 (0.026)				
Hosmer and Lemeshow's Test (P)	0.000 (1.000)				
Nagelkerke R ²	0.160				
Classification accuracy	95%				

*P<0.05; **P<0.01; ***P<0.001

hospital or chemist. The in-depth interviews also corroborated that some of the respondents did consult with a traditional healer either before or after they visited the hospital or chemist. This reinforces the need to specifically ask patients where they have been before coming to hospital, knowing this is a reality within our environment and may affect prognosis of critical conditions. However, all the respondents interviewed during the IDI that had co-utilized both traditional healers and orthodox medicine admitted they did not use both orthodox medicines and traditional medicines concurrently. The study in south eastern part of Nigeria did not explore concurrent use of both methods. Concurrent use of both methods was reported among almost half of study participants in another study in Nigeria.^[32] There is need to specifically take a history of this from patients and discourage this practice in the general population because of synergistic effects this may have.

Previous studies^[18,24,25] reported no association between educational level and use of traditional medicine but the finding of this study showed there was an association not only with education level but also with monthly income and how payment was made for treatment. Means of payment for treatment was the singular predictor of use of traditional healers in this study; as those that had their employer pay for treatment were eight times more likely to utilize Traditional healers. This is buttressed by the finding that very few of the respondents had a form of health insurance, earned above N50, 000 and worked within the formal sector. Financing healthcare is a major challenge affecting individuals as may be the case in this study. In the informal sector, employers are likely to give little or nothing for healthcare especially because there are no formal contracts of conditions of work and benefits/entitlements are not defined. It is surprising that majority earned below N50, 000 despite having a form of post-secondary education.

The strength of this study is that it provided information about utilization of Traditional healers specifically among those that had healthcare needs within recent twelve month period. Also, it showed the preferences of healthcare among the women and provided information distinguishing between use of traditional healers as a co-utilization or concurrent use in same condition and episode.

Limitation

The study is limited by recall bias (especially as regards the time duration of 12 months) and also that the participants were in a well state at the time of study might probably have elicited a different response compared to if respondents had health conditions as at time of study. Factors and conditions that might have promoted use of different types of traditional healers (traditional surgeons, traditional bone setters) were not explored in this study.

Conclusion

The utilization of traditional healers and co-utilization of traditional healers with orthodox medicine was high in this study but a concurrent use of both methods was not established. Orthodox medicine was a preferred choice of health care amongst majority. Considering the high prevalence of co-utilization, it is recommended that an in-depth history of drugs or remedies used by patients should be delved into by orthodox medicine practitioners. Further studies by researchers on the active ingredients of some of the remedies used and vigilance for the interaction with orthodox medicine is recommended. Also, non-concurrent use of both methods which already exists should be reinforced.

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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.

References

- Marbella A, Harris M, Diehr S, Ignace G, Ignace G. Use of native American healers among native American patients in an urban native American health center. *Arch Fam Med* 1998;7:182-5.
- Birhan W, Giday M, Teklehaymanot T. The contribution of traditional healers' clinics to public health care system in Addis Ababa, Ethiopia: A cross-sectional study. *J Ethnobiol Ethnomed* 2011;7:39.
- WHO. The health of the people what works. The African regional Health Report 2014.
- Truter I. African traditional healers: Cultural and religious beliefs intertwined in holistic way. *SA Pharm J* 2007;74:56-60.
- Oyebola DDO. Traditional medicine and its practitioners among the Yoruba of Nigeria: A classification. *Soc Sci Med* 1980;14:23-9.
- Adesina SK. Traditional medical care in Nigeria. Available from: <http://www.onlinenigeria.com/health/?blurb=574>. [Last accessed on 2019 Sep 20].
- Available from: <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/orthodox-medicine>. [Last accessed on 2020 Oct 12].
- Edet R, Bello OI, Babajide J. Culture and the development of traditional medicine in Africa. *J Adv Res Humanit Soc Sci* 2019;6:22-8.
- Abbo C, Odokonyero R, Ovuga E. A narrative analysis of the link between modern medicine and traditional medicine in Africa: A case of mental health in Uganda. *Brain Res Bull* 2018;145:109-16.
- Green B, Colucci E. Traditional healers' and biomedical practitioners' perceptions of collaborative mental healthcare in low- and middle-income countries: A systematic review. *Transcult Psychiatry* 2020;57:94-107.
- Asare M, Danquah SA. The African belief system and the patient's choice of treatment from existing health models: The case of Ghana. *Acta Psychopathol* 2017;3:49.
- WHO fact sheet 2007. Available from: <http://www.who.int/mediacentre/factsheets/fs326/en/>. [Last accessed on 2019 Nov 20].
- Pourat N, Lubben J, Wallace SP, Moon A. Predictors of use of traditional Korean healers among elderly Koreans in Los Angeles. *Gerontologist* 1999;39:711-9.
- Babb DA, Pemba L, Seatlanyane P, Charalambous S, Churchyard GJ, Grant AD. Use of traditional medicine by HIV-infected individuals in South Africa in the era of antiretroviral therapy. *Psychol Health Med* 2007;12:314-20.
- Nxumalo N, Alaba O, Harris B, Chersich M, Goudge J. Utilization of traditional healers in South Africa and costs to patients: Findings from a national household survey. *J Public Health Policy* 2011;32(Suppl 1):S124-36.
- Izzo AA, Ernst E. Interactions between herbal medicines and prescribed drugs: An updated systematic review. *Drugs* 2009;69:1777-98.
- Audet CM, Blevins M, Rosenberg C, Farnsworth S, Salato J, Fernandez J, *et al.* Symptomatic HIV-positive persons in rural Mozambique who first consult a traditional healer have delays in HIV testing: A cross-sectional study. *J Acquir Immune Defic Syndr* 2014;66:e80-6.
- Anand P, Othon GC, Sakadi F, Tassiou NR, Hamani ABD, Bah AK, *et al.* Epilepsy and traditional healers in the Republic of Guinea: A mixed methods study. *Epilepsy Behav* 2019;92:276-82.
- Muhamad M, Merriam S, Suhani N. Why breast cancer patients seek traditional healers. *Int J Breast Cancer* 2012;2012:689168.
- Gyasi R, Tagoe-Darko E, Mensah C. Use of traditional medicine by HIV/AIDS patients in Kumasi Metropolis, Ghana: A cross-sectional survey. *Am Int J Contemp Res* 2013;3:117-29.
- Bertakis KD, Azari R, Helms LJ, Callahan EJ, Robbins JA. Gender differences in utilization of health care services. *J Fam Pract* 2000;49:147-52.
- Nteta TP, Mokgatle-Nthabu M, Oguntibeju OO. Utilization of the primary health care services in the Tshwane Region of Gauteng Province, South Africa. *PLoS One* 2010;5:e13909.
- Shisana O, Simbayi LC. Nelson Mandela/HSRC Study of HIV/AIDS: South African National Prevalence, Behavioural Risks and Mass Media, 2002. Cape Town: HSRC Press.
- Oreagba IA, Oshikoya KA, Amachree M. Herbal medicine use among urban residents in Lagos, Nigeria. *BMC Complement Altern Med* 2011;11:117.
- Bamidele JO, Adebimpe WO, Oladele EA. Knowledge, attitude and use of alternative medical therapy amongst urban residents of Osun state, southwestern Nigeria. *Afr J Tradit Complement Altern Med* 2009;6:281-8.
- Duru CB, Diwe KC, Uwakwe KA, Duru CA, Merenu IA, Iwu AC, *et al.* Combined orthodox and traditional medicine use among households in Orlu, Imo State, Nigeria: Prevalence and determinants. *World J Prev Med* 2016;4:5-11.
- Ameade EPK, Ibrahim M, Ibrahim H, Habib RH, Gbedema SY. Concurrent use of herbal and orthodox medicine among residents of Tamale, northern Ghana, who patronize hospital and herbal clinics. *Evid Based Complement Alternat Med* 2018;2018:1289125.
- Adewuya A, Makanjuola R. Preferred treatment for mental illness among southwestern Nigerians. *Psychiatr Serv* 2009;60:121-4.
- Oredola AS, Odusanya OO. A survey of the perception of the quality of and preference of healthcare services amongst

- residents of Abeokuta south local government, Ogun state, Nigeria. *Niger J Clin Pract* 2017;20:1090-7.
30. Asuzu CC, Akin-Odanye EO, Asuzu MC, Holland J. A socio-cultural study of traditional healers role in African health care. *Infect Agent Cancer* 2019;14:15.
31. Grietens KP, Toomer E, Boock AU, Hausmann-Muela S, Peeters H, Kanobana K, *et al.* What role do traditional beliefs play in treatment seeking and delay for Buruli ulcer disease?-Insights from a mixed methods study in Cameroon. *PLoS One* 2012;7:e36954.
32. Onyeka TC, Ezike HA, Nwoke OM, Onyia EA, Onuorah EC, Anya SU, *et al.* Herbal medicine: A survey of use in Nigerian presurgical patients booked for ambulatory anaesthesia. *BMC Complement Altern Med* 2012;12:130.