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Mapping of Traditional Medical Practices in Kaduna State, Nigeria

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Abstract

Traditional medicines have been in existence as the only source of health care provider in most African societies for centuries before the coming of orthodox medicine. As health seekers faces serious risk associated with cost, quality and delay in seeking appropriate healthcare over time and space, it is essential for policy makers in the Kaduna State to expand the amount and quality of care in traditional health practice so as to create access to healthcare. This study relied on data generated through Focus Group Discussions (FGDs), Key Informant Interviews and questionnaire survey. A cursory look at the result shows that 99.3% of the respondents have traditional medicine centres, while 0.7% claimed they don't, this is evident as most of the respondents affirmed that there are traditional medicine centres in their respective areas. On the number of people who patronize particular types of Traditional medicine centres available, the study shows that 28.5% are bonesetter; traditional birth attendant account for 25.0% while 24.75% are herbalist, also 12.75% are spiritualist, 5.5% are circumciser and no particular specialty have 1.25% and 1.75% respectively while others are traditional barbers. The implication is that most of the traditional medicine centres are available and is highly patronized by the people of Kaduna State because of their perception towards the usefulness of traditional medicine to cure different ailments. The One-Way ANOVA was performed to find out if there is space-time variation in the time of day for visitation to traditional medicine facility. The result obtain shows that there is a significant spatial and temporal variation in the time of the day for visitation among the selected LGAs (F =15.147, p<0.05). This therefore means that the time of the day for visitation to a particular traditional medicine facility varies across space and time. The factors identified in this study shows that patronage of traditional medicine has increased due to a number of factors, such as poor or non-effectiveness of synthetic drugs which are either fake and adulterated or expired. The study recommends that traditional medicine should explore the various dimensions of the revival and reinvention of traditional medicine practice in Kaduna State, Nigeria.

Keywords: Traditional, Medical, Mapping, Perspectives, Practices and Patronage

1. Introduction

Traditional healers have been in existence as the only source of health care provider in most African societies for centuries. Traditional medicine has the potentials to contribute immensely to healthcare delivery system in Nigeria and particularly Kaduna State. Like many states in Nigeria, Kaduna State has a lot of traditional medicine potentials. But these potentials are yet to be harnessed for the benefit of the people. Some diseases such as broken bone, sprain, malaria fever, and so on are better cured using traditional medicines, but the mindset of people, especially those in urban areas discourages them from using traditional medicine. For example, Ofabo, a rural community in Kogi East, is renowned as a home of traditional medicine practitioners (Atawodi, 2014). In the past, the community was known for playing host to visitors from neighbouring towns and cities who sought the services of native healers to cure various types of ailments. But despite the healing proficiency and its importance to humanity, Ofabo is cut off from modern-day realities as it lacks the basic amenities needed by the people to live a decent life (Abu, 2020).

There are also scientific evidence that Orthodox medicine cannot treat every condition effectively, and some drugs have other side effects and are bacteria resistant (WHO, 2008). Despite its efficacy, traditional

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medicine is often used as a last resort when a variety of reasons do not permit the patient to access modern health care system. The belief that traditional medicine is ineffective and unscientific still occupies the minds of some people. Traditional medicine, according to Buor (2003), is largely patronized by the rural people who constitute a greater proportion of the population.

Traditional healthcare has been the most efficacious, but unsuccessful, due to limited government attention. Yet, there is acute shortage of medical doctors, nurses and other health staff especially at primary healthcare levels in the widely patronized modern health facilities. Poor conditions of facilities including poor wage package made it extremely difficult to retain staff particularly in rural areas. The supply of drugs to facilities is irregular and ineffective. Essential drug items are out of stock in public hospitals and the PHC clinics are virtually without Government procured drugs (Vision 2020 Kaduna State, 2010). In rural areas of Kaduna State, one sometimes travels for several kilometers before finding the nearest dispensary or pharmacy. In addition, loosing working hours, transport fares and the high cost of medicine must also be taken into consideration. Thus, the search for alternative or complimentary healthcare delivery system is not only imperative but urgent, so as to come up with policies that will integrate trado-medical services and orthodox medical system to enhance the health and wellbeing of the people in Kaduna State. This study seek's to explore and map out traditional medical practices in Kaduna State Nigeria.

2. Study Area

Kaduna State is located on the southern end of the high plains of northern Nigeria, bounded by parallels of latitude 9°02′N and 11°32′N, and extends from the upper River Mariga on longitude 6°15′E to 8°38′E of the Greenwich meridian on the foot slopes of the scarp of Jos Plateau (Udo, 1970). The state comprises twenty three (23) Local Government Areas. Kaduna State shares its boundary with Katsina State to the North, Niger State and Abuja to the west, Plateau State to the South and Kano State to the east. The State occupies an area of approximately 45,711.2km² and had a population of 6,113,503 people with an annual growth rate of 3% during the 2006 census (FRN, 2010).

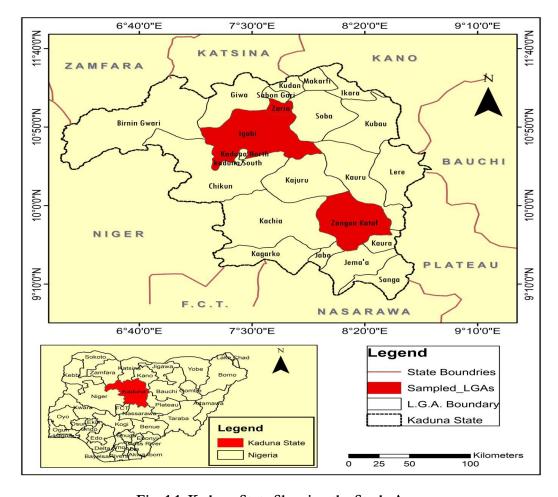


Fig. 1.1: Kaduna State Showing the Study Area

Source: Adapted from Administrative Map of Kaduna State

3. Materials and Methods

3.1 Methodology

The types of data include socio-economic data, place or layout of resident data, demographic data; cultural data and perceive distance such as distance from the health care service provision is used.

The data that was used for this study were obtained from both primary and secondary sources. The primary source involves the use of structured questionnaire and in-depth interview while the secondary source involves the use of textbooks, magazines, journals, articles, gazettes and other relevant materials were used for the review of related literature.

Kreijcie and Morgan (1970), sampling Table was used, therefore, 400 sample sizes was chosen for the study. Therefore, maximum sample size of 400 was used as the sample frame. Furthermore, the purposive sample method was used. Kerlinger (1999) describes purposive sampling as being characterized by the use of personal judgment and a deliberate attempt to obtain representative samples by including presumable typical areas or groups in the sample.

Both descriptive and inferential statistics were used in the analysis. The descriptive statistical analysis was adopted for summarization of data, tables and graphs.

4. Results and Discussions

The information in Figure 1. shows that 99.3% of the respondents have traditional medicine centres, while 0.7% claimed they don't, this is evident as most of the respondents affirmed that there are traditional medicine centres in their respective areas. On the number of people who patronize particular types of Traditional medicine centres available, the study shows that 28.5% are bonesetter; traditional birth attendant account for 25.0%, 24.75% are herbalist, 12.75% are spiritualist, 5.5% are circumciser and No particular specialty have 1.25% and 1.75% respectively and others are traditional barbers (*Wanzami*). The implication is that most of the traditional medicine centres are available and is highly patronized by the people of Kaduna State because of their perception towards the usefulness of traditional medicine to cure different ailments.

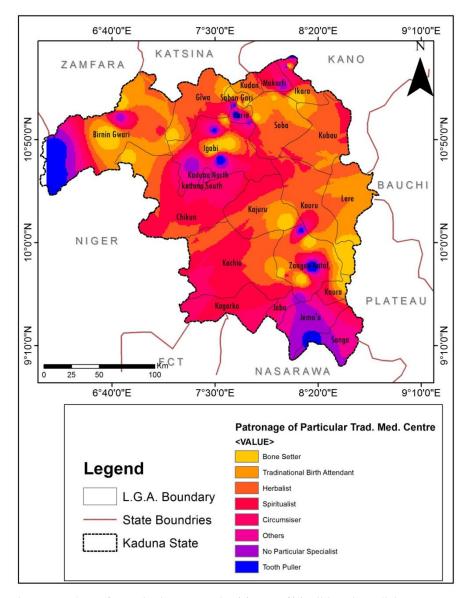


Fig 1: Number of People that Patronize Types of Traditional Medicine Centre Source: Field Survey, 2014

Visit to these traditional medicine providers were done on different days. Thus, information on the days of the week respondent's visited the respective traditional medicine facilities across the three selected Local Government Areas (LGAs) are shown in Figure 2. In Igabi LGA, 10.25% of the respondent's visit traditional medicine provider on Mondays, 8.75% make their visit on Sundays followed by 5.5% of the respondents who made visit on Tuesday while 5.25% visits traditional medicine on Saturdays. However, the reason why Monday and Sundays dominate in patronage may be due special treatment days set aside by healers for antenatal, post-natal and children related ailments and so on, which often attract high patronage by the respondents. Thus, there are no specific days of visit to healthcare centres, visits are made when the need arises, however, the most suitable days were Mondays, followed by Sundays, and then Tuesdays/Saturdays. Visits were seldom made on Fridays probably because of the nature of the study area which is dominated by Muslims and Hausas in particular whom observes Fridays as special day for Jumat prayers.

In Zangon-Kataf, 7.25% respondent's visit traditional medicine centre on Tuesdays, followed by 4.5% who made visit on Wednesdays, 3.25% made visit both on Sunday and Mondays, while the days of the week that was considered unsuitable for such visit are Thursday and Friday with 2.0%. This may be due to the fact that Mondays Tuesdays and Wednesdays are special days set aside by traditional healers for special treatment or it may be due to the fact that these days are often taken very serious by respondent's/workers in all sphere of life as such those days often record high patronage. However, even in the orthodox hospital Mondays, Tuesdays and Wednesdays often have high patronage compare to other days of the week.

In Zaria LGA, 17.75% of the respondent's pay visit on Mondays, followed by 8.5% who visit on Tuesday and 5.25% made visit on Saturday, while the most unsuitable day for visitation was Thursday with 0.25%. In the three LGAs, Mondays and Tuesdays are identified as the suitable days of the week for visitation, while Fridays are the most unsuitable days for such visits.

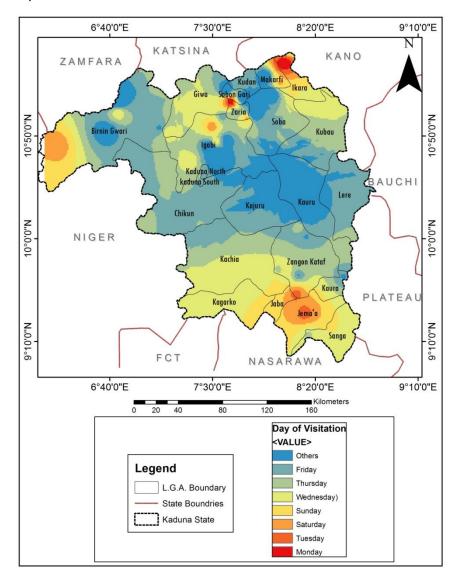


Fig 2: Distribution According to Days of Visitation of Traditional Medicine Source: Field Survey, 2014

Across the three selected LGAs, visitation to the identified traditional medicine facilities in Figure 3 is made at different hours and times of the day. In Igabi LGA, 13.5% visit traditional medicine facility between 7 – 11a.m, followed by 10.0% who made visit by 12 midnight and 4.0% visit at 1 – 6a.m, while 2.25% made visit at 1 – 6p.m. In Zangon-Kataf, 12 mid-day is considered most suitable for visitation; this was followed by 1 – 6p.m and then 12 midnight, while the most unsuitable hour of the day for visitation is 7 – 11p.m. In addition, in Zaria LGA, 12 midday is most suitable, followed by 1 – 6a.m and then 7 – 11p.m, 12 mid-day is consider the most unsuitable hour of the day for visitation. The result in the table shows that the hour of the day suitable and unsuitable for visitation varies significantly among the selected LGAs (F = 18.364, p<0.05) as shown in the ANOVA result in Table 1. In concise, 12 midnight and 7 – 11a.m are identified by the analysis as the most suitable hours of the day for visitation/consultation, while 1 – 6p.m is mostly unsuitable. Visitations done at 12 midnight are usually related to spiritual cleansing and incantations related to fruit of the womb, to make peace with aggrieved persons who are dead and tranquility that makes it possible to invoke certain spirits among other reasons.

On the time of the day that is suitable for visitation, different responses were given across the selected LGAs. For instance, in Igabi, morning is considered absolutely suitable for visitation, followed by afternoon and then evening. In Zangon-Kataf, afternoon and midday are suitable time for consultation, while in Zaria, morning

and afternoon were suitable time of the day for visitation. In all, the results identify morning and afternoon as most suitable time of the day to make visit to the respective healthcare facility.

Table 1: Distribution of Respondent's by ANOVA result on the space-time variation in hour and time of visitation of traditional medicine facility

Variables	Sum of Squares	Df	Mean Square	F	p-value
Variation in the hour of visitation	98.194	2	49.097	18.364*	0.001
	927.695	347	2.673		
	1025.889	349			

*Significant at 5% alpha level Source: Field Survey, 2014

Likewise, One-Way ANOVA is performed to find out if there is space-time variation in the time of day for visitation to traditional medicine facility. The result obtain shows that there is a significant spatial and temporal variation in the time of the day for visitation among the selected LGAs (F = 15.147, p < 0.05). This therefore means that the time of the day for visitation to a particular traditional medicine facility varies across space and time.

Table 2: Distribution of Respondent's by ANOVA result on the space-time variation in hour and time of visitation of traditional medicine facility

Variables	Sum of Squares	Df	Mean Square	F	P-value
Training Color	(2.202		24.4.7	45 447%	0.004
Variation in the time of the day	62.293	2	31.147	15.147*	0.001
suitable for of visitation	713.547	347	2.056		
	775.840	349			

*Significant at 5% alpha level Source: Field Survey, 2014

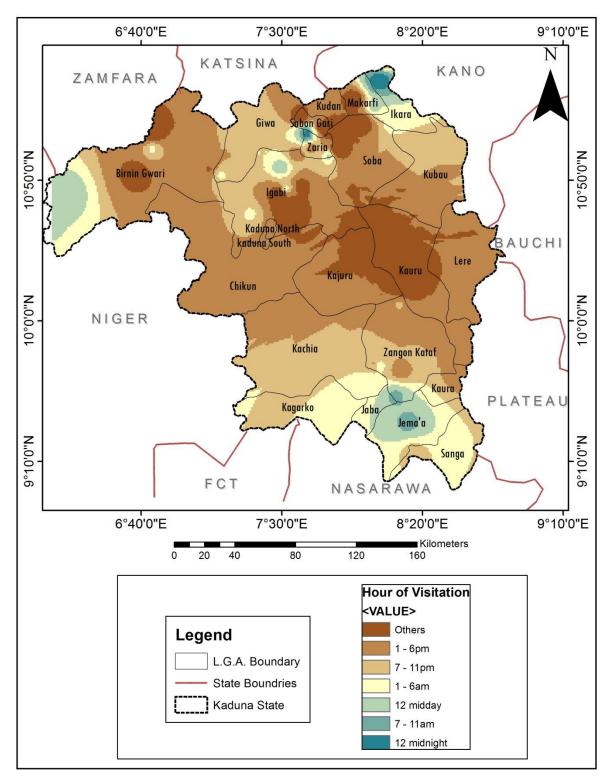


Fig 3 Hourly and Time of Visitation to Traditional Healing Centres Source: Field Survey, 2014

Respondent's in the three selected LGAs travelled for varying distance to the nearest traditional medicine centre for treatment (Figure 4). In Igabi LGA, majority of the respondents travelled 1 - 2km to the nearest traditional medicine centre, this is followed by health facility that is 3 - 4km, while traditional medicine facility more than 6km is seldom travelled to seek treatment.

In Zangon-Kataf and Zaria LGAs, majority of the respondents also travelled 1 - 2km to the nearest traditional medicine centre. This may imply that the traditional medicine facilities are closer to the people. Thus, in the three LGAs, 1 - 2km is usually travelled in order to access the nearest traditional medicine centre. In concise,

the information in Figure 4 indicates that a greater percentage of the people in Igabi, Zangon-Kataf and Zaria LGAs travel 1 – 2km to the nearest traditional medicine centre.

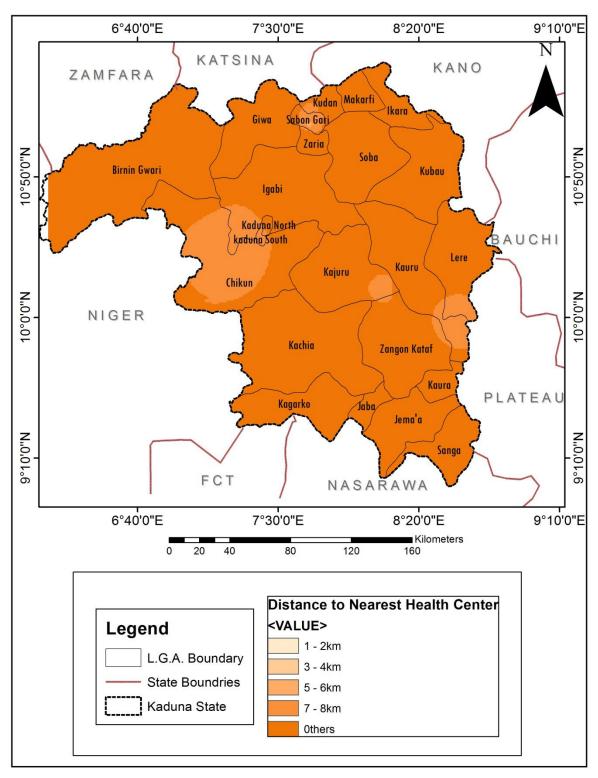


Fig 4: Distance Travelled to Nearest Traditional Medicine Centre Source: Field Survey, 2014.

On the level of patronage of traditional medicine Figure 5 shows that 14.75% patronize traditional medicine 10 times a week in Igabi LGAs, 22.25% in Zangon Kataf while 25.0% in Zaria LGAs. In all 37.25% patronize traditional medicine in Igabi LGAs, 27.5% in Zangon Kataf LGAs and 35.25% in Zaria LGAs. This entails that the people of Igabi LGA patronize traditional medicine most, Follow by Zaria LGA then Zangon Kataf LGA.

One-Way Analysis of Variance (ANOVA) test was performed to find out if the level of patronage of traditional medicine varies among the three LGAs. The ANOVA result in Table 3 shows that the level of patronage of traditional medicine vary significantly among Zaria, Zangon-Kataf and Igabi LGAs (F = 34.820, p < 0.05).

Table 3: Distribution of Respondent's by ANOVA on the Patronage of Traditional Medicine

Variables	Sum of Squares	Df	Mean Square	F	p-value
Variation in the patronage of traditional	0.410	2	0.205	6.367*	0.002
Healer	11.178	347	0.032		
	11.589	349			
Variation in the nature of patronage of	43.458	2	21.729	34.820*	0.001
traditional medicine	216.542	347	.624		
	260.000	349			

*Significant at 5% alpha level Source: Field Survey, 2014

Therefore, this decision is because the probability value of 0.001 is less than 5% significance level. The significant variation in the level of patronage of traditional medicine means that its utilization varies across geographical space as a result of varied environmental factors.

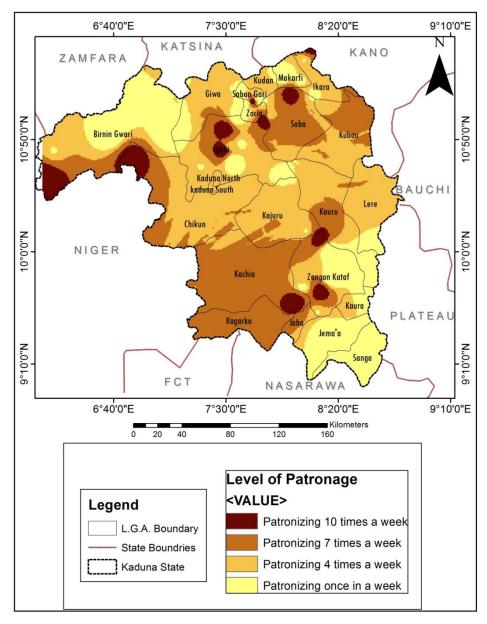


Fig 5: Level of Patronage of Traditional Medicine Source: Field Survey, 2014.

Figure 6 shows the result of traditional healers' diagnosis on patrons' symptoms of illness. It indicates that different diagnostic results were given to patrons across the LGAs by the traditional healers. As usual, in Igabi and Zangon-Kataf LGAs, pathological, psychological and spiritual factors were identified as the symptoms for the illnesses that made patrons to consult traditional healers. In Zaria, pathological and psychological factors were identified. The pattern of diagnosis for the various symptoms showed high form of similarity among the LGAs selected for the present study. This similarity in the diagnostic result may be attributed to the geographical location of the areas.

The result of One-Way ANOVA indicates that the result of traditional healers' diagnosis did not vary significantly among the selected LGAs (F = 1.483, p>0.05), due to the similarities in the diagnoses procedure in the different Local Government Areas under study.

Variable	Sum of Squares	Df	Mean Square	F	p-value
Variation in diagnostic result	1.030	2	.515	1.483*	0.228
	120.524	347	.347		
	121.554	349			

Table 4: Distribution of Respondent's by ANOVA result of the variation in diagnostic results

*Insignificant at 5% alpha level Source: Field Survey, 2014

From the focus group discussion the finding is confirmed by the opinion of the respondent who noted thus; "my husband was involved in an accident and had a broken bone for over one year and couldn't find treatment after several visits to the modern hospitals. It took only the intervention of a traditional healer in Igabi. Now, he is physically fit and healthy and has started walking. I believe that most of the Traditional Medicine is very effective" (45 years respondent's from Igabi).

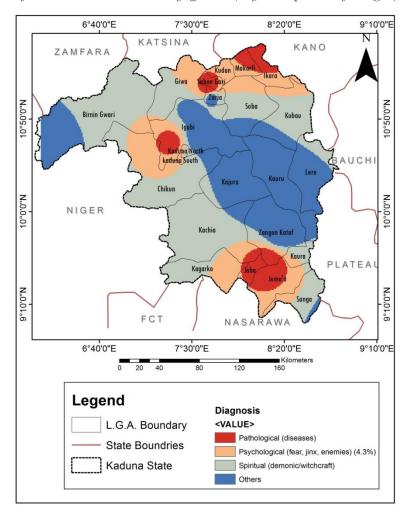


Fig 6: Traditional Medicine Diagnosis Source: Field Survey, 2014

The choice of healthcare centre whether traditional or modern is usually influenced by the perception of people on the causes of illness. The result in Figure 7 shows that 32.0% of the respondent's indicate acceptability as a reason that influences perception of traditional medicine, 24.0% accessibility and 21.5% as affordability. This is evident in African continent where uncommon deaths and known symptoms of some ailments are attributed to be caused by human factor and are immediately tackled using traditional medicine. For instance, spiritual attack is attributed to evil people who cast spell to kill their victims, and without any diagnosis, the victim is taken to traditional healers for healing and thereafter protection. However, apart from the cause of ailment, several other factors interplay to enhance the patronage of traditional medicine in the study area. They are availability,

adaptability, efficacy, suitability, flexibility, taste and preferences as prominent factors that come together to influence the patronage of traditional medicine.

Others are of the opinion that the high maternal mortality rate as a result of incompetent medical staff and the absence of medical equipment for such purpose has made most childbearing mothers to resort to traditional birth attendants for delivery. These people are believed by the childbearing mothers to be well experienced and skillful in handling delivery issues than many staff in the modern facility. Most women have argued that giving birth under the guidance of traditional birth attendants is faster and easier than the long labour experienced in the hospital. This is another reason why they patronize traditional medicine.

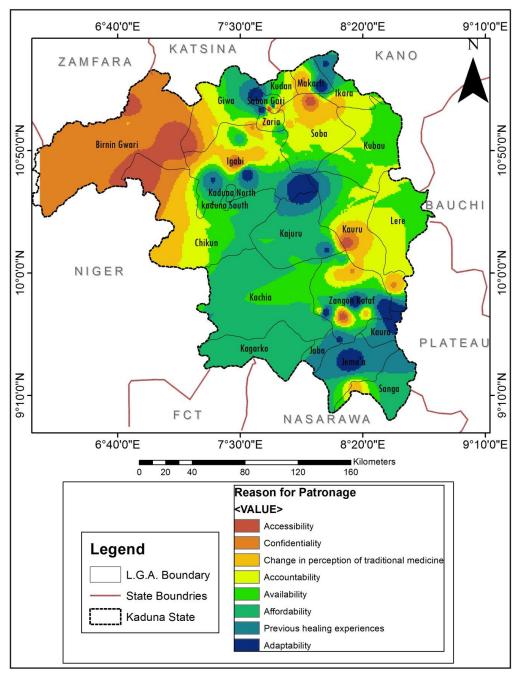


Fig 7: Reasons for Patronizing Traditional Medicine Source: Field Survey, 2014

In the literature, several factors are known to determine patients' choice of a particular healthcare whether traditional or orthodox, and the factors vary across geographic space. Information on the determinants of the choice of healthcare is depicted in Figure 8. The responses of respondent's as shown in the table indicate clear variance in healthcare choice among the three selected LGAs. For instance, the choice of healthcare according to respondents in Igabi LGA is nature of illness, confidentiality and kind of treatment. These three factors greatly influence the choice of traditional or orthodox health facility in the area. In Zangon-Kataf LGA, confidentiality, efficacy and ability to cure illness are potent factors considered by the people before making choice. The people in this area believe much in the efficacy of a particular healthcare in relation to the nature of illness cum the ability of the healthcare to keep record secretly. However, a look at the determinants of healthcare choice in Zaria identifies confidentiality, ability to cure illness and nature of illness as key factors. Looking at the determinants of healthcare choice across the three LGAs show some form of similarity in the factors that determine the selection of a particular healthcare.

For instance, across the three LGAs, confidentiality is a potent determinant of choice; this was followed by nature of illness. Indeed, the nature of illness is one obvious factor that significantly determines patients' choice of healthcare facility. If the ailment is perceived to be an attack that would defile orthodox medicine, such a person is immediately taken to the traditional healers. The ability of a particular healthcare to maintain confidentiality in patient's case file among other issues that require strict confidentiality or secrecy determines patient's choice. The one way ANOVA result obtained in (Table 5) shows that there is a significant spatial variation in the factors that determine the choice of a particular healthcare facility among the selected LGAs

(F = 14.889, P < 0.05; p-value 0.001; df 2/347).

Table 5: Distribution of Respondent's by ANOVA on the Factors Influencing Perception and Patronage of Traditional Medicine

Variables	Sum of Squares	Df	Mean Square	F	p-value
Factors influencing patronage of	43.458	2	4461	14.889*	0.001
traditional medicine	216.542	347	.161		
	260.000	349			

*Significant at 5% alpha level Source: Field Survey, 2014

This simply means that though there is interplay in the factors that determine choice of traditional medicine, they vary significantly across geographic space.

From the in-depth interview the respondent is of the opinion that: "we will be dying in our villages because we are too poor to afford money to pay for the medicine, the bed for admission and other necessary medical facilities to take care of our ailments" (35 year respondent from Zaria).

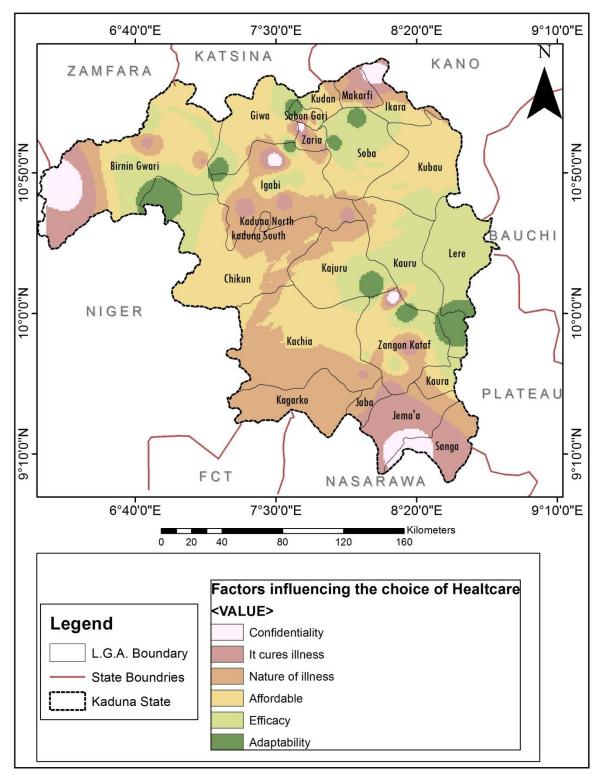


Fig 8 Factors Influencing the Choice of Healthcare Services Source: Field Survey, 2014

5. Conclusion

The conclusion to be drawn is that traditional medicine in Kaduna State is influence by so many factors such as accessibility, availability, affordability, adaptability, acceptability and efficacy and so on. It was also revealed that traditional medicine is fixed in space and time and that accord it services to be available, accessible and affordable by the greater population of people that patronizes it in the study area. Finally, the respondents of traditional medicine are very much satisfied with the performances of traditional medicine in the treatment of ailments and other health challenges in the study area; hence there is general improvement in patronage of traditional medicine.

References

- Abu, T and Bamidele, O. (2020). Ethno medicinal Herbal Knowledge and Practice among Elders in Igalamela-Odolu Local Government Area of Kogi State, Nigeria. International Journal of Traditional and Complimentary Medicine Research, Vol. 1: Issue 3, 98-106.
- Atawodi, S. E., Olowoniyi, O. D., Obari, M. A., Ogaba, I. (2014). Ethnomedical Survey of Adavi and Ajaokuta Local Government Areas of Ebiraland, Kogi State. Annual Research & Review in Biology 4(24): 4344-4360.
- Buor, D. (2003). Analysing the Primacy of Distance in the Utilization of Health Services in the Ahafo- Ano South District, Ghana. *The International Journal of Health Planning and Management*, 18(4), 293-311.
- Federal Republic of Nigeria (FRN). (April, 2010). Federal Republic of Nigeria 2006 Population and Housing Census. Priority Table Vol. III. Abuja: National Population Commission.
- Joshua, S. (2010). An Assessment of the Role of Traditional Medicine in Health Care Delivery of Sabon Gari Local Government. An Unpublished M.Sc. Thesis Submitted to Department of Geography, Ahmadu Bello University, Zaria.
- Joshua, S. (2016). Spatio Temporal Variation in the Perception and Patronage of Traditional Medicine in Kaduna State Nigeria. A P.hD. Thesis Submitted to Department of Geography, Ahmadu Bello University, Zaria.
- Krejcie R.V. and Morgan D.W. (1970). Determining Sample Size for Research Activities. *Journal of Educational and Psychological Measurement*, **30**(1): 607 610.
- Kerlinger, K. (1999). Purposive Sampling". In: R. Stock (1981), Healthcare Behaviour in Rural Nigerian Setting. A Ph.D Dissertation Presented to University of Liverpool, 30pp.
- Vision, K. 2020 (2010). Economic Transformation Blue print. Kaduna State, Nigeria.
- Udo, R.K. (1970). Geographical Regions of Nigeria. University of California Press. Vision 2020 Kaduna State, (2010). Report of the Vision 2020 Technical Working Group on Urban and Rural Development, Kaduna State, Nigeria.
- World Health Organization, (2008). Report on the Performance of Health Care Systems in Nigeria.