

Effectiveness of Yoruba language radio jingles in promoting knowledge, attitude and practices regarding Lassa fever among women in Ondo state, Nigeria

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Abstract

Background: Lassa fever is one of the known Neglected Tropical Diseases (NTDs) that plague some states in Nigeria. Radio jingles in indigenous language have been adopted as a veritable risk communication approach to promote public knowledge in the bid to reduce the incidence of Lassa fever outbreaks in Ondo state which has recorded the highest number of victims in recent times. Given the high level of women's contribution in home keeping, food storage as well as maintenance of environmental hygiene practices, their knowledge, attitudes, and practices (KAP), is fundamental for the control of Lassa fever.

Objective: The study examines the efficacy of indigenous (Yoruba) language radio jingles on knowledge, attitudes, and practices towards Lassa fever prevention among women in Ondo state.

Methods: The study adopted a qualitative approach using Focus Group Discussion as the method of data collection.

Results: Majority of the sampled respondents showed ample knowledge of Lassa fever. However, most respondents showed poor attitude towards the rodent vector and the recommended preventive measures have not been fully adopted by the majority of the respondents due to some identified barriers that hinder them from performing certain preventive practices.

Conclusion: The radio jingles in Yoruba language have succeeded in promoting adequate knowledge of Lassa fever among women in Ondo state. Although attitude towards the disease vector is still poor and total compliance with the recommended preventive practices that will reduce the spate of Lassa fever in the state have not been achieved.

Introduction

Radio is the most accessible mass medium across many nations in Africa. It has remained the most patronised by literate, semi-literate and non-literate audiences as it is less expensive to own and sustain with little or no reliance on electricity power supplies. Research has also shown that Nigerians utilize various devices to access information from radio.¹

Radio is a unique medium for health communication in Nigeria's multi-cultural and multi-lingual society due to its ability to break language barriers and the capacity to reach people in the hinterlands bringing various health issues to the knowledge of the "common" man. More so, public health communication interventions via radio campaigns are particularly cost-effective considering of its wider reach and impact. Therefore, radio jingles are utilized in health risk communication to improve knowledge of people who may be at risk of a particular health hazard and persuading them to adopt favourable attitude and behaviours that underline prevention and effective management of infectious diseases. The catchy musical and memorable messages in form of songs and or monologue and dialogical interactions or a mixture of both are employed to educate the public on the risk factors that stimulate infectious diseases spread as well as the necessary precautions that limit the chances of infection.

It is needless to say that the effectiveness of all radio jingles is made possible with the help of appropriate language. Thus, the efficacy of radio jingles depends on the use of "popular" languages and expressions that aid message comprehension and recall among targeted audiences.

Radio jingles in indigenous language tend to yield impressive outcomes compared to the English versions, particularly where the illiteracy rate is high. Indigenous language jingle could be ubiquitous when figurative language such as idiomatic expressions, alliterations, proverbs, metaphors, and humorous statements are used to ascribe deeper meanings to the messages being passed across to the audience.²

For the fact that risk communication deals with the general public involving different population groups, there has been a growing interest in how such communication could be most effective.

Language and lexical contents, for instance, could constitute a barrier to public comprehension of health issues. Oftentimes, people tend to exhibit poor comprehension of English about health risks as certain specialized and common

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terms relating to diseases are often misunderstood.³ This supports the observation of an extremely positive effect on public awareness after a change from the medical terminology to a local word for glaucoma in rural communities in Ghana.⁴ Therefore, using the indigenous language nomenclatures to explain disease causations, risk factors and prevention stimulates good knowledge and behaviour change.

Communication gap has a significant impact on health outcomes particularly in

rural communities where cultural and linguistic disparities are greater.³ Considering the communication discrepancy among Nigerians and a large number of residents who cannot communicate in English, communicating health risks in the language of social interaction among the people to enhance proper comprehension can never be over-emphasized. Media messages in indigenous languages promote better understanding and enhance audience satisfaction as it initiates a sense of intimacy with the audience and better understanding of the circumstances resulting to a deeper interpretation of meaning.⁵⁻⁸

However, communicating health messages in multilingual societies such as Nigeria is not an easy task. The multiplicity of indigenous languages of diverse dialectal groups and their usage constitute a huge challenge to health communication due to the need to develop information materials in a variety of languages to enhance message understanding by the entire population.⁹

Lassa fever is one of such health concerns that radio jingles have been utilised to draw public attention for its prevention. Lassa hemorrhagic fever occurs mostly in the West African sub-region with about 100, 000 to 300, 000 recorded cases per annum, resulting in about 5,000 deaths every year.^{10,11}

Beside the relatively large number of Lassa virus seropositive rodents which stimulate the reoccurrence of the disease in Nigeria, socio-cultural practices that promote human contact with rodents also determine the disease persistence.¹²⁻¹⁵ These harmful practices include sun-drying of farm produce on the roadsides, rodents consumption, consumption of food contaminated by rats' excreta and secretions as well as poor practices relating to household and environmental hygiene.

Available evidence shows that risk communication interventions on Lassa fever targeted at the public include radio jingles in indigenous languages.¹⁶ These jingles persuade the audience to avoid contact with rats, adopt proper storage of raw and cooked foods, maintain good personal and environmental hygiene and also avoid contact with infected persons amongst others with the bid to engender positive knowledge, attitude and behaviour towards the disease prevention.

Various studies have pried into the effectiveness of radio jingles from the advertising perspectives. Aside from the consensus regarding the potentials of radio jingles in promoting brand awareness through products' positioning and recall, some authors have established that all jin-

gles do not lead to better product/s remembrance,¹⁷ the effectiveness of jingles is dependent on customers' income and the music of jingles have a significant effect on product retention and recall.^{18,19}

From a different perspective, authors who examined the effectiveness of radio jingles in promoting environmental sanitation in Ondo and Kwara states respectively found that listeners fully understood the messages packaged in indigenous language.^{20,21} However, most people did not adopt the recommended behaviour due to infrastructure deficiency.²⁰ Additionally, an increase in the cultivation of indigenous vegetables in Southwestern, Nigeria was not solely dependent on the awareness created by the radio jingles.²² However, there is a paucity of evidence-based research on the effectiveness of Lassa fever radio jingles in indigenous languages in Nigeria to justify the financial and human resources expended on them. Against this background, this study examined the effectiveness of radio jingles in the Yoruba language in promoting women's knowledge, attitude and practices towards Lassa fever prevention in Ondo state. Hence, the following research questions guided the investigation:

How effective are Yoruba language radio jingles in promoting women's knowledge of Lassa fever?

What is the most preferred Yoruba dialect for Lassa fever jingles?

What is the effect of radio jingles in Yoruba language on women's attitude towards Lassa fever?

What is the effect of radio jingles in Yoruba language on women's current behaviour towards Lassa fever?

Materials and methods

Ethical consideration

This study was reviewed by Covenant University Research and Ethics Committee for ethical considerations and approved with reference number CHREC/107/2019. All selected participants were educated about their rights before they granted consent by filling and signing the informed consent form. Personal identifiers were removed by assigning numbers to each participant to guarantee the confidentiality of information obtained.

Study area and population

Ondo State is predominantly occupied by the Yorubas from different dialectal groups.²³ Although Ondo is not exclusively affected by Lassa fever, the state has recorded the highest number of victims across var-

ious local governments for four consecutive years.²⁴⁻²⁷

The most recent census data recorded that the state population stands at 3,460,877 comprising 1,745,057 Male and 1,715,820 female.²³ However, this study involves only female residents from 18 years and above.

Research design, sampling procedure and sample size

The study employed a qualitative approach through Focus Group Discussion. Samples were drawn from the three Senatorial Districts in the state. Two Local Governments Areas each randomly selected from each district. One urban community and one rural community were randomly selected from each local government. Thus, a total of four communities were selected from each senatorial district. On the whole, twelve (12) communities participated in the study. Participants were selected through volunteer sampling. An invitation letter was issued to various women associations within selected communities soliciting for participants.

Sample size

Then, a Focus group session consisting of eight respondents was held in each selected community. Therefore, the sample size consisted of ninety-six (96) participants (*i.e.* 8 participants $\times$ 12 communities). A self-designed open-ended interview-guide was used to facilitate various sessions of FGD after it was pre-validated in Akure-South local government with necessary amendments.

Inclusion/exclusion criteria

Eligible participants who indicated interest were purposively selected based on (1) prior knowledge of Lassa fever (2) exposure to existing Lassa fever radio jingles in Yoruba language and (3) resident in selected communities. While those who fail outside these criteria were left out.

The FGD sessions adopted a multiple moderator format. The lead moderator facilitated the discussions in Yoruba language whilst taking note of the responses, the second moderator tape-recorded the interactions while the third member coordinated the participants and timing of each session.

Data analysis

The tape-recorded interactions and notes were cross-checked for accuracy before transcription and translation to English by professionals. The data was continually sorted by constant comparison and analysed according to identified predominant themes.

Results

Knowledge of Lassa fever

All participants reported that Lassa fever radio jingles in Yoruba language were explicitly clear and comprehensible. Thus, there was no difficulty in decoding the messages on the cause of Lassa fever, as well as its symptoms and preventive measures.

A respondent observed that:

The message is very clear in native language. Even the market women will understand it.

Most of the FGD participants expressed that the Yoruba language jingles were more trusted as it provided the information on Lassa fever in a more dramatic conversational style using their indigenous mother tongue. A participant said:

The conversation in those radio jingles in Yoruba language is attractive. The way they call the attention of everybody to listen to the information and how they explain everything about it in Yoruba, I think I understand it better. I also trust the jingles more than the English version

Participants' knowledge of Lassa fever varied from simplistic to scientific descriptions of the disease. The simpler description specifically related Lassa fever to how dreadful the disease could be, its highly contagious nature and how fast it could lead to death. The majority of the participants described Lassa fever in relation to the disease vector. Thus, rat was identified as the reservoir of the Lassa virus. Some participants explained that:

Lassa fever is an infection that is gotten from rats.

I know that Lassa fever is caused by rats. I also know that it's a viral disease.

Other participants aligned their description of Lassa fever to the primary transmission routes. One of them said:

Lassa fever is a disease that can be contracted through eating food contaminated by rodents' urine and faeces

A few participants gave a more detailed scientific description of Lassa fever although majority of them failed to describe it as a preventable disease. A respondent recounted learning that Lassa fever is:

Lassa fever can be described as an animal-borne illness that is transmitted to

human beings and it is prevalent in our society these days especially when such animals like rats are able to eat food that we keep in our stores if such foods are exposed. Or they probably pass urine or faeces on food or food stuffs, if human being eats the food, they will be infected.

Also, many participants were able to recall the messages in the jingles ranging from identification of the rodent vector, modes of transmission and preventive measures. The key messages recalled and mentioned include; covering of all edibles to avoid being contaminated by rats, blocking of holes at homes, keeping houses and environment clean, maintaining good hygiene and throwing of refuse far away from home.

Some respondents recounted that:

The key message is that Lassa fever is caused by rats. So, we should cover our foodstuff in tight containers, kill rats, and wash our hands with soap especially before cooking food.

They said we should cover our garri, elubo (cassava flour), our amala (yam flour), our guguru (cocoyam flasks), so that rat will not eat it or play inside. If we observe all these, we shall prevent Lassa fever.

We have been told not to dry our garri on the roadside again and keep our foods in containers that has cover.

However, fewer respondents expressed that the key messages are highlights on the symptoms of the disease and the need to visit the nearest hospital when the symptoms manifest, as well as early detection and treatment for possible survival from Lassa fever.

A participant recounted that:

The key messages are; avoid contact with rats and its bodily fluids, avoid contact with body fluids of other people especially sick persons and avoid self medication, visit the nearest hospital if you notice any of the symptoms of Lassa fever because early detection and treatment is key to survival

Most preferred Yoruba dialect for Lassa fever jingles

Many participants said that the general Yoruba language used in the radio jingles was acceptable to them. However, a few respondents indicated that local dialects such as Akure, Akoko, Owo, Ondo, Apoi, Idanre, Ikale, Ilaje and ijaw would be beneficial in educating women in the rural areas

from where the disease often emanate.

A respondent said:

I don't have any problem with the language. I understand the general Yoruba language but some women in remote villages in this Ondo state may not be able to understand the messages. If the jingles could be produced or translated to local dialects it will help to educate them especially the old women

Attitude towards Lassa fever prevention

Remarkably, some participants indicated that Lassa fever is a dangerous disease that can lead to an untimely death. Thereby rats are perceived as threats to their well being and should be eliminated in the human habitat. One of the participants noted:

The radio jingles have helped me to understand that I am not supposed to permit rats to enter my home or anywhere within my surroundings.

However, some participants demonstrated poor attitude towards rodents in their homes as well as other preventive measures. A participant commented:

Nko ni agbara lati lepa awon eku kaakiri kaakiri. Mo kan fi won silẹ nibẹ titi emi yoo, lo si oja lati ra ogun majele eku fun won pa won patapata

(Meaning) *I don't have the strength to be chasing rats up and down. I just leave them there until I go to the market and buy rat poison to kill all of them*

Another participant said;

It is only God that can protect us. Even if we do everything they asked us to do, it is not a guarantee. With prayers, I believe Lassa fever will not get to my house.

Current behaviour towards Lassa fever prevention

Many of the respondents mentioned that they have started performing more than three preventive behaviours recommended in the jingles. Among the prominently cited behaviours are; covering of food items in tight containers and polybags or sacs, killing of rats, rat-proofing of homes, hand washing, and keeping the environment clean. A respondent said:

Since I heard about Lassa fever, I always cover our foods, both raw and cooked food, and even the leftover or I put them inside bucket or pot that has cover so that rat will not eat them. When I buy amala

(yam flour), I will put it inside a bucket that has cover, and I use polythene bags to pack wastes. That's how I do it to make sure that we don't get Lassa.

Barriers to action

Some participants described various domestic and external challenges that prevent them from practicing certain preventive measures. Inability to eradicate rats in homes, non-availability of an alternative method of drying food items, inability to stop drinking of garri, and poor waste disposal practices due to inadequate provisions of waste disposal basins/ trash containers by the public waste management agency were mentioned as barriers towards complete compliance with the desired practices indicated in the jingles. One of them said:

I have been trying my best to do everything they asked us to do to help prevent Lassa fever particularly keeping my environment clean and blocking all rat holes but rats are stubborn. They will still find a way to enter someone's house even when the environment is clean. Again, they said we should throw our refuse far away from home. That one is very difficult as waste management people don't come all the time. We used to pack the dirt in sacs and put them outside in front of our compound until they come.

Another participant said;

I cannot carry my wastes to far places when bushes are around my house. We just throw them into the bush there. Another thing is to stop drinking garri. Sometimes when I am hungry and there is no food I just drink garri. But I store the garri in a bucket with cover; I cannot die of hunger because I want to run away from Lassa fever.

In a more argumentative response, an older participant said;

Ijoba yoo kan beere awon eniyan lati se ohun ti won ko le se fun mutumuwa. Ti n bas a ohun elo ounjẹ mi sinu oorun ni ita ile mi, nibo ni kin sa si?

(Meaning) Government will just ask people to do what they cannot even do themselves. If I don't dry my food items in the sun outside my house where else will I dry it?

Discussion

This study disclosed that radio jingles in Yoruba language have been widely utilised for Lassa fever risk communication and women who are exposed to these jingles

understood the messages. The jingles have promoted ample knowledge of the disease reservoir, transmission routes, risk factors, symptoms and preventive measures. This substantial level of knowledge could be linked to the persistent cases of Lassa fever outbreaks and the associated use of jingles in Yoruba language across various radio stations in the state. This finding implies that more women would obtain adequate knowledge about Lassa fever if they have access to these jingles. Although, it cannot be ruled out that radio jingles in other languages particularly those in Pidgin-English which are also on the airwaves may have influenced the participants' knowledge.

The predominant use of Yoruba language and total neglect of local Yoruba dialects confirms the assertion that English and some few major languages dominate the airwaves excluding smaller language groups.²⁸ It suffices to say that, radio jingles on infectious diseases such as Lassa fever should be all-inclusive because the language barrier obscures meaning. Health matters demand joint action from the citizenry. Ideally, everyone should be aware and be able to perform the ideal behaviours to protect themselves and society at large. Therefore, proper comprehension of the indigenous language landscape in the state is critical to improving risk communication intervention for Lassa fever through indigenous language jingles.

The findings also indicate that the respondents have started practicing some recommended behaviours such as covering of food items in tight containers, and the use of rats' poisoning amongst others. This finding supports a recent study which found that exposure to information about hand washing hygiene influences some mothers' behavior.²⁹ However, attitude towards the Lassa vector is still poor, irrespective that most respondents perceive Lassa fever as a life-threatening disease. Moreover, the lack of an alternative method of drying food items and inadequate waste disposal facilities were indicated as the major barriers hindering women from complete adoption of recommended preventive practices. The majority of the respondents confessed to piling up domestic wastes around homes and indiscriminate refuse disposal in nearby bushes. Hence, incidents of Lassa fever in the states could be linked to unhealthy practices expressed in this study. This result supports earlier submission: that people know more does not mean they would act differently.²⁰ Hence, adequate knowledge expressed in this study did not translate to absolute compliance with all recommended preventive behaviours.

Limitations

The English and Pidgin-English radio jingles that run concurrently with the Yoruba version in most radio stations in the state, may have some impacts on participants' knowledge of Lassa fever reported in this study.

Conclusions

Indigenous language radio jingles are veritable tools for Lassa fever risk communication. This paper examined Yoruba language radio jingles' effectiveness in promoting Lassa fever prevention among women. The study concludes that irrespective of ample knowledge of the disease, attitude towards the disease vector is still poor and total compliance with preventive behaviours has not been achieved due to some identified barriers. To achieve significant attitudinal and behaviour changes towards Lassa fever, the following recommendations were made:

Since the Yoruba language radio jingles have positively influenced women's knowledge of Lassa fever in Ondo state, its use in risk communication should be sustained across all radio stations.

Translation of existing jingles into local Yoruba dialects as reinforcement to the general Yoruba language to cater for the needs and satisfaction of various dialectical groups in the state.

Radio jingles in indigenous language could be deliberately utilized to reshape attitude towards the Lassa virus vector.

Provision of alternative methods of drying of food items at the community level and communicating the same to the public.

The provision of basic refuse disposal facilities will help reduce the challenge of waste disposal to reduce rats' invasion of homes.

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