Mass media reportage of Lassa fever in Nigeria: a viewpoint

Joseph Oluchukwu Wogu1, Christiana Ogeri Chukwu2, Kenneth Adibe Nwafor3, Ekenechukwu Anazor Anikpe4, Joel Chinedum Ugwuoke1, Chinyere Christiana Ugwulor-Onyinyechi1 and Chiedu Eseadi5

Abstract
In Nigeria, the mass media are used independently or complementarily in health promotion activities to achieve positive lifestyle changes. The mass media can play a positive role in combating the Lassa fever epidemic and its attendant fatality in Nigeria. The present review is necessitated by the widespread reportage and persistence of Lassa fever infection and fatality in Nigeria. From June to October 2018, the authors searched for relevant information in the grey literature, Scopus database, PubMed, Cochrane database, Google, and Nigerian newspapers and magazines, among other sources. Based on the reviewed literature, the authors argue that the mass media reportage of Lassa fever is limited in its content and undermined by poor network connection, the time of the day the broadcasts are made, and people’s indifference. These factors have posed a hindrance to health and environmental behaviours that would help to prevent Lassa fever and have resulted in cases of Lassa fever. It is recommended that media reporters intensify efforts at understanding the best time of the day to broadcast Lassa fever prevention information. The mass media should also make efforts toward providing accurate information regarding disease outbreak because this might help reduce panic and resistance to control and prevention measures.

1Department of Mass Communication, University of Nigeria Nsukka, Enugu State, Nigeria
2Alex-Ekwueme Federal University, Ndufu-Alike Ikwo, Ebonyi State, Nigeria
3Department of Mass Communication, Ebonyi State University, Abakaliki, Nigeria
4Department of Fine and Applied Arts, University of Nigeria Nsukka, Enugu State, Nigeria
5Department of Educational Foundations, University of Nigeria Nsukka, Enugu State, Nigeria

Corresponding author:
Christiana Ogeri Chukwu, Alex-Ekwueme Federal University, Ndufu-Alike Ikwo, Ebonyi State, Nigeria. Email: christiana.ogerichukwu@gmail.com

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Introduction
Evidence shows that an outbreak of Lassa fever recently occurred in Nigeria, involving many states and fatalities.\textsuperscript{1–5} The mass media can play a positive role in combating the Lassa fever epidemic and its attendant fatality in Nigeria. The mass media encompasses print and non-print methods of disseminating information (including magazines, newspapers, radio, and television) to a large number of people. One of the advantages of the mass media in health promotion activities and/or health intervention is that it can be used to reach very high numbers of people to engage in activities related to health behaviour changes.\textsuperscript{6–16} Several authors have noted significant positive roles of the mass media in health interventions and positive impacts in the promotion of health behaviour changes among people with communicable and non-communicable diseases, reduction of mental health-related stigma, and improvement in health service utilisation.\textsuperscript{6–16} Based on the roles the mass media can play in health intervention, authors have described the mass media as an educator, supporter, promoter, and programme supplementer.\textsuperscript{6} Thus, the mass media can be utilised as an independent type of intervention for educating people and supporting lifestyle changes. In addition, the mass media can be utilised as a complementary form of intervention for promoting or supplementing the efficacies of other interventions aimed at health promotion.\textsuperscript{6} Proper execution of mass media campaigns can help complement the efforts of clinicians toward the prevention of diseases.\textsuperscript{12} Therefore, the aim of this paper is to highlight the mass media reportage of Lassa fever in Nigeria.

Methodology
This paper adopts a brief discussion approach. From June to October 2018, the authors searched for relevant information in the grey literature, Scopus database, PubMed, Cochrane database, and Google. The primary mass media sources of information for this review included Nigerian newspapers and magazines such as Vanguard, Sahara Reporters, Premium Times, Daily Post, The Punch, The Guardian, Information Nigeria, The Telegraph, Nigeria Health Watch, NigeriaGalleria, The Communicator, and The Sun. Television stations from which Lassa fever information was also derived included African Independent Television and the Nigerian Television Authority. The authors used no inclusion or exclusion criteria for the literature search. The following search keywords were used to obtain information for this review: “Lassa fever,” “media,” “mass media,” “Lassa fever outbreak in Nigeria,” and “news reports of Lassa fever in Nigeria” were used to obtain information for this review.

Results and Discussion
Reports on the disease outbreak indicated that at the commencement of 2012, the Nigeria Federal Ministry of Health sent notification of the Lassa fever outbreak in
Nigeria to the World Health Organization. On 22 March 2012, 623 suspected cases of Lassa fever (including 70 deaths) were reported from 19 Nigerian states. Available data from August 2015 to January 2016 indicated 159 suspected cases (including 82 deaths) across 19 Nigerian states. The 2016 report by the Nigeria Centre for Disease Control (NCDC) showed that Lassa fever outbreak was active in 5 Nigerian states, and 985 suspected cases and 126 deaths were reported. The 2017 report by the NCDC revealed that 19 Nigerian states reported at least one confirmed case of Lassa fever; the case fatality rate was 29.5% and 12.8% in confirmed and probable cases, respectively. The 2018 NCDC report indicated that there were 2576 suspected cases from 22 Nigerian states from January to September. From these, the NCDC reported that 510 cases were confirmed positive, 10 cases were considered probable, and 2055 cases were negative. According to the report, the 2018 Lassa fever outbreak resulted in 134 deaths among confirmed cases and 10 among probable cases with a 26.3% case fatality rate among the confirmed cases. The high fatality rate from outbreaks of Lassa fever might have been due to the prevalence of certain unhealthy sanitary and environmental behaviours that increase the risk of Lassa fever among Nigerians. For example, people (particularly children) living in rural areas eat rodents, which are the primary carriers of Lassa fever. Transmission routes of Lassa fever include human contact with the faeces of these rodents and/or human food waste that these rodents scavenge on as well as the eating of poorly covered food that may have been urinated upon or eaten in part by these rodents.

The Nigerian mass media focused on the latest outbreak of Lassa fever in many states of the country. Some of the Nigerian mass media that are still disseminating information about Lassa fever outbreak, its causal agents, its signs and symptoms, preventive measures, and existing efforts toward combating the epidemic include Vanguard, Sahara Reporters, Premium Times, Daily Post, The Punch, The Guardian, Information Nigeria, The Telegraph, Nigeria Health Watch, NigeriaGalleria, The Communicator, and The Sun. Furthermore, government at all levels, non-governmental organisations, and faith-based organisations used radio stations, television stations, and social media to complementarily create awareness, sensitisise, and mobilise the populace against the spread of the disease. News flashes, breaking news, newspaper headlines, and media commentaries on the epidemic were present across the entire national and regional dailies, radio, and television stations.

However, the present review suggests that the media reporting of the outbreak was only partially successful for several reasons despite the fact that many people are now aware of Lassa fever and/or its outbreaks have been contained or are being contained. Despite ongoing media sensitisation, many Nigerians, such as people living in the rural populace in the Ijebu North Local Government Area of Ogun State, are reportedly unaware that rodents are vectors of Lassa fever. Illiteracy could also contribute to poor reception of the media reportage on Lassa fever among the people. Educated people largely have access to the Internet and at least one form of mass media, and as such could receive different findings from those in the Ijebu North Local Government Area of Ogun State.

Nigerian people’s level of awareness of Lassa fever could be a contributing factor to the degree of success in combating the disease. One Nigerian study showed that 101 of 500 (20.2%) respondents in a community-based sample said that they
had heard about Lassa fever. Additionally, 19.4% of the study sample had good knowledge of Lassa fever occurrence, 14.1% had good knowledge of the causes of Lassa fever, 17.0% had good knowledge of the mode of transmission, and 13.9% had good knowledge of Lassa fever prevention and control strategies. It is therefore important to scale up efforts to increase knowledge about the disease, vectors, symptoms, and prevention strategies among Nigerian people within and outside endemic communities.

Given the above reports, we argue that the Nigerian mass media activities were only partially successful because they ignored some essential information relating to the epidemic. In our own view, inappropriate structuring and timing of radio and television programmes also seems to have hindered the promotion of appropriate health and environmental behaviours aimed at combating Lassa fever in Nigeria. These were complemented by the problems of an unreliable power supply, which prevents the more than 70% Nigerians living below the poverty line from accessing media programmes. Our observations indicate that the non-reception of networking and people’s indifference to media programmes on Lassa prevention because they perceived them as a government propaganda machine might have hindered the mass media’s efforts to create much awareness about Lassa fever in the country. Another factor is overcrowding of people in most places. A previous study conducted in the urban slums of the western part of Nigeria showed that of 500 participants, 43.0% were living in overcrowded rooms and 9.1% claimed to have never seen a rat in their homes.

The state and federal governments as well as national and international health bodies and ministries have made several efforts to combat the Lassa fever epidemic in Nigeria. The federal and state governments in Nigeria are enhancing disease surveillance for early detection, reinforcing treatment of patients, and conducting awareness campaigns among the affected population. Lassa fever treatment centres (Lassa Fever Research and Control Centre of Irua Specialist Hospital in Edo State and the Virology Laboratory of Lagos University Teaching Hospital in Lagos State) have been established in some of the affected states, such as Edo and Lagos, to combat the spread of the disease. The World Health Organization is collaborating with the Nigeria Federal Ministry of Health in the surveillance of and response to outbreaks of Lassa fever, covering contact tracing, follow-up, and community mobilisation. Additionally, the first international conference is being organised by the NCDC to enable researchers to collaborate with each other and share research findings about Lassa fever with regard to what is known and where knowledge gaps still exist and to prioritise the Lassa fever research and response plan for the future. The theme of the conference is “50 Years of Lassa Fever: Rising to the Challenge.” The conference, which provides travel scholarships to Nigerian participants to help reduce expenses, will be held in Abuja, Nigeria on 16 and 17 January 2019. These are laudable efforts geared toward overcoming the Lassa fever epidemic in Nigeria, reinforcing training for clinicians, and sensitising communities. Overall, it is suggested that affected communities should be highly engaged in the Lassa fever control and prevention efforts in the country. It is also suggested that the Nigerian mass media should be supported and provided with accurate and up-to-date information about the disease by the relevant health organisations such as the NCDC to enable them to disseminate reliable information to the public.
Conclusion

Lassa fever is a serious public health issue in Nigeria. The mass media can play a positive role in combating Lassa fever and its attendant fatality in Nigeria. However, it seems that mass media activities have been only partially successful because they ignore essential information relating to the epidemic. We also argue that information gaps and the lack of timely and appropriate information are hindrances to the promotion of appropriate health and environmental behaviours that would help to reduce Lassa fever in the country. It is recommended that media reporters intensify efforts at understanding the best time of the day to broadcast disease prevention information. The mass media should also make efforts toward providing accurate information regarding disease outbreak because this might help reduce panic and resistance to control and prevention measures. Media broadcasting of disease outbreak and other related information may occur during the early morning or late evening hours when many Nigerians, especially civil servants, are at home and prepared to listen to news on the radio, view the television, or search the Internet.

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ORCID iD

Joseph Oluchukwu Wogu http://orcid.org/0000-0002-9815-407X

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