

Dealing with Lassa fever: Managing and curtailing the virus from the healthcare workers perspective in Nigeria

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Abstract

Lassa virus is the causative agent of Lassa fever (LF) and the viral hemorrhagic fever caused by a rodent-borne arenavirus and endemic in West Africa. The outbreak in Nigeria has been a public health challenge. Although awareness is being created and treatment provided there are drivers that could play a role in the progress of the treatment or inhibit the treatment. This could also influence the role of healthcare workers in providing treatment and care to the patients. Treatment of Lassa fever is mainly supportive and societal attributes can make or mar the treatment outcome as well as the spread of the disease. Unfortunately, effective strategies to address these drivers have not been fully utilized. The study assessed how thirty-four healthcare workers perceived Lassa fever and the factors that influenced the treatment and response process in Ondo state.

A qualitative study was conducted utilizing Focus Group Discussions and In-depth Interviews to collect data from thirty-four healthcare workers providing treatment and care to Lassa fever suspects, confirmed cases, significant others and contacts. Four Focus Group Discussions (six participants each) and ten In-depth Interviews were conducted to determine the impact of the Lassa fever epidemic and the factors that influenced treatment and management. The study was conducted among healthcare workers who had been in contact with Lassa fever patients at one point in time in private and public hospitals in Ondo State.

The data collected was analyzed using the thematic analysis to determine the factors that had an impact on treatment and management. Some of the highlighted themes ranged from denial, acceptance, stigma, and proximity to run test/confirm cases to limited PPE materials. The findings highlight the need to create awareness, train healthcare workers and engage stakeholders on best practices in treating and managing Lassa fever.

Introduction

Lassa fever is a viral hemorrhagic fever caused by a rodent-borne arenavirus that is endemic in West Africa and was first identified in the town of Lassa in Nigeria in 1969. The transmission route is through direct exposure to the excreta of infected rats, or from person to person via body fluids. Lassa virus infection causes symptomatic disease and in more than half the cases is fatal causing more than 8,000 deaths and the outbreak in Nigeria has been a public health challenge [1].

Strategies have been adopted to track, treat and curb the virus. Awareness is being created and treatment provided however, there are drivers that could play a role in the progress of the treatment or inhibit the treatment. This could also influence the role of healthcare workers in providing treatment and care to the patients. Treatment of Lassa fever is mainly supportive and societal attributes can make or mar the treatment outcome as well as the spread of the disease. Unfortunately, effective strategies to address these drivers have not been fully utilized. Thus, this study assessed how healthcare workers perceived Lassa fever and the factors that influenced the treatment and response process [2-5].

Methods

A qualitative study was conducted utilizing Focus Group Discussions (FGDs) and In-depth Interviews to collect data while

the purposive sampling technique was used to choose the respondents. The study population consisted of 34 healthcare workers (twelve males and sixteen females) who had been in contact and provided treatment and care to Lassa fever suspects, confirmed cases at one point in time in private and public hospitals in Ondo State. This study was carried out in May 2018 in four Local Governments Areas (LGAs) in Ondo State (Owo, Ose, Akure-North and Ondo West) where Lassa-fever cases were reported and managed-. Ethical approval to conduct the study was obtained from the NIMR Institutional Review Board and institutional approval was obtained from the facilities of the participants. The participants were provided with detailed verbal and written information about the study; were made aware of their right to decline to answer questions. The participants gave their written consent, were de-identified, enrolled and interviewed.

The interviews consisted of four Focus Group Discussions with six participants in each group and ten interviews. The FGDs were stratified

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based on gender and profession. The healthcare workers spanned from Doctors, Nurses, Lab technicians to health volunteers. All interviews were conducted in English and were digitally recorded, in private rooms and offices at the various health facilities where the participants felt comfortable. Interview guides were used for both the Focus Group Discussions and In-depth interviews. The topic guides for the FGDs and In-depth interviews covered health workers' perceptions and experiences of working during the Lassa-fever outbreak, constraints they faced, challenges in the health systems, their coping mechanisms, and options to increase the resilience of workers and the health system in the future. The recordings of the interviews were transcribed verbatim, the data was analysed using the Nvivo software to provide emerging themes to determine the factors that had an impact on treatment and management.

Results

Factors that emerged to have had an impact on the treatment and management of Lassa fever suspects and confirmed cases from this study include: denial, acceptance, stigma, proximity to run test/confirm cases, limited PPE materials, creating awareness and educating people on Lassa fever, collaboration from agencies, proper reporting of cases, incentives for healthcare workers treating patients, culture, belief and practices.

Stigma, denial and acceptance

Stigma is still a major issue also on the side of the healthcare workers as they are labeled in the community as "Lassa People" and members of the community want to have little or no association with them. They also have to battle with patients having to accept that they have been infected and getting treatment and care.

Respondent 18 stated, "When they see us, they run away from us because they think we have Lassa, they call us "Lassa People" and don't want us to treat or take care of them.

Proximity to run test/confirm cases

The healthcare workers reported that there were very few labs/centers testing samples for Lassa and this made the turn-around time for confirming cases longer. Also, some centers were aware of the urgency and were proactive in testing and getting the results.

Respondent 16 stated, "there are very few facilities that we can send the samples to and be sure that they will send the results on time, we want more facilities to help in testing the samples so we can start treating on time."

Limited PPE materials

Most of the healthcare workers stated that Personal Protective Equipments were not available but in facilities where they were available, they were made to economize even if it meant having to re-use them.

All the respondents stated that adequate PPE should be provided to enable them work efficiently while protecting themselves appropriately.

Culture, belief and practices

Beliefs and cultural practices were still factors that hindered the process as family members of patients wanted to have the remains of their loved ones to bury and with the burial process put in place to curb the spread, there was the tendency for family members not to divulge the correct information to the proper authority so they could perform their burial rites in line with culture and practice that has spanned decades.

Respondent 22 stated "Nigerians take burial rites seriously and it is very difficult telling a family that they cannot bury their loved one because of a disease, that is the final respect they can give to the person."

Creating awareness and educating people on Lassa fever

Healthcare workers believed that there is the need to go into every part of the community to continue to create awareness and educate people on every aspect of Lassa fever as well as keep them abreast with updates on the disease. This should be done in the local dialects to drive home the message and ensure that people understand the information communicated.

Collaboration from agencies

The healthcare workers believe that if there is a linkage among the healthcare facilities and collaboration with other agencies like the environmental agencies, research institutes and laboratories; treatment and care, tracking and curtailing the virus will be more effective.

Proper reporting of cases

Health facilities advocate for proper accounting and reporting of suspected cases and confirmed cases in the country, to give the real estimate and prevalence of cases. This will help the government and relevant authority have a true picture and understand the gravity/impact of the disease and the rippling effect and the toll it could take on the nation at large.

Respondent 34 stated "As a management staff it is essential for healthcare workers to report and document cases so that we know the true situation we are dealing with in terms of numbers and from the numbers, we can then plan for their treatment, care and tracking of contacts effectively" [6-11].

Conclusion and recommendation

There are psychosocial, economic and political drivers still mitigating efforts of healthcare workers to manage and curtail the Lassa fever epidemic in the country. The findings highlight the need to create awareness, train healthcare workers and engage stakeholders on best practices in treating and managing Lassa fever. There is also the need to engage the relevant stakeholders and ensure that the necessary PPE materials are made available, prompt services are provided by hospitals, laboratories and agencies to collaborate in tackling the Lassa fever epidemic.

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