

The Influence of the Nigerian Newspaper on Lassa Fever Reportage

Smith Sam

Department of Mass Communications, Enugu State University of Science and Technology
Enugu, Nigeria
samloco63@hotmail.com

Smith Stella

Emergency Preparedness and Response Research Group, Nigerian Institute of Medical Research
Yaba, Lagos, Nigeria
stellasmith@yahoo.com

Adedeji A

M & E Unit, Nigerian Institute of Medical Research
Yaba, Lagos, Nigeria
deji_goke@gmail.com

Abstract

This study was aimed at investigating the influence of the print media in the reportage of LF in Nigeria. The nature and extent of media coverage about LF in four major national newspapers namely The Sun, The Guardian, The Nation and The Punch were examined. The period of study ranged from January 2016 to April 2016. Analysis of the newspaper article was according to content. The content analysis looked at 10 topics which were randomly selected and all had to do with LF. A total of 182 articles were published between January 2016 to April 2016 and these were divided into news (104; 57.1%), Front page (34; 18.7%), with opinion (1; 0.5%) amongst the least. The most common topic was precaution and preparedness of the public LF (46.2%), followed by outbreak of LF in Nigeria: death rates recorded (22%). The least was funding/cost of eradicating LF (1.6%). Month by month analysis of LF showed that January was the most reported month and April the least reported. It is recommended that newspaper coverage of LF continues all year round for effective awareness, prevention and control of the virus.

Key Words: Lassa fever, Nigeria, newspaper

Introduction

Lassa fever (LF) or Lassa haemorrhagic fever (LHF) is an acute viral illness caused by the Lassa virus which was first discovered and isolated in 1969 in the town of Lassa in Borno state of Nigeria (Frame, Baldwin, Gocke, & Troup 1970).

Lassa virus is a member of the Arenaviridae virus. The primary host of the virus is the Natal multimammate mouse (*Mastomys natalensis*), found commonly in most of Sub-Saharan Africa (McCormick, 1987). Lassa fever has been reported to be primarily spread by contact with the faeces or urine of rodents (McCormick, 1987).

It is endemic among the rodent population in countries such as Nigeria, Sierra Leone, Guinea, and Liberia, where it is known to cause outbreaks on an almost annual basis (World Health Organisation, 2016).

Given its high rate of incidence, Lassa fever is a major problem in affected countries (Centre for Disease Control, 2014a and 2014b).

Lassa fever commonly occurs in West Africa resulting in 300,000 to 500,000 cases annually with 5,000 deaths per year (Richmond & Baglole, 2003).

Disease outbreaks have been commonly observed in Nigeria, Liberia, Guinea, Central African Republic, Sierra Leone, Benin, Ghana and lately Mali, but probably exists in other West African countries as well (World Health Organisation, 2016). Overall, the case fatality rate (CFR) has been reported to be 1% while those from hospitalized patients with severe LF reach 15% (World Health Organisation, 2016).

Clinical manifestation of LF is extremely difficult to distinguish from other febrile illness and most often at the initial phase (Bausch et al., 2001). Symptoms such as gastrointestinal, pharyngitis and cough are common signs. However late complications of LF include convulsion, facial oedema, pleural and pericardial effusions, bleeding and coma. The terminal stages of illness include shock (Bausch et al., 2001).

The drug of choice in humans is ribavirin which is better commenced early before one week of infection for survival (McCormick et al., 1986).

Prevention of LF has been reported to be effective when good community hygiene is promoted so as to discourage rodents from entering homes (World Health Organisation, 2016). Such effective measures include proper garbage disposal far from home, maintenance of clean households and cat storage as well as storage of grains and other foodstuffs in rodent proof containers. Furthermore, health workers and staff should always apply standard infection prevention and control when caring for patients regardless of their presumed diagnosis (World Health Organisation, 2016).

Lassa Fever and media

A suspected outbreak of the current LF epidemic in Nigeria was reported on the 8th January 2016 (ACAPS, 2016). By 14 January, 2016, the number dead were 53 from 140 suspected cases in 14 states with a case fatality rate (CFR) of 37.9% and as at 20 January 2016 the number of deaths had reached 63 from 210 suspected cases in 17 states of the country, although local media reported 212 suspected cases (ACAPS, 2016). ACAPS, (2016) also reported that the local media had warned of potential deaths as high as 1,000 from the outbreak.

ACAPS (2016) was quick to point out that some sources reported the first case of LF outbreak in November 2015, in North Eastern state of Bauchi, while others reported August 2015, in Niger state. All in all ACAPS, (2016) attributed the lack of prompt response to deaths due to LF as a result of cultural and religious beliefs from the northern states which led them to not reporting the LF cases in the states.

According to Disease outbreak news of 27 January 2016, the outbreak of LF from August 2015 – 23 January 2016, was 159 suspected cases of LF, including 82 deaths across 19 states. (The National IHR Focal Point of Nigeria, 2016)

The report further said four states; Bauchi, Edo, Oyo and Taraba accounted for 54% of confirmed cases (n=54) and 52% reported deaths (n=34). The remaining 15 states reported less than five confirmed cases.

According to Flickr (downloaded from the internet on 25th May 2016) report by Moore of 7 March 2016, there were already 175 cases of LF and 101 deaths.

The report by Senthilingam of CNN in 17 March 2016 (downloaded from the internet on 25th May 2016) showed that more than 130 died from LF in 22 states and as at 14 March as reported by NCDC, the total number of suspected cases were 254 with 137 deaths (suspected and probable) and CFR of 53.9%. This was

compared with the 2012 outbreak of LF with 1,700 infected and 112 deaths.

From the Vanguard publication of 5 April 2016 by Olawale on the UN organisation report on LF more than 160 were killed in West Africa with Nigeria accounting for 85% (138) out of 164 of LF cases.

The ProMed mail of ISID of 5 April 2016, reported 585 LF cases with 58 lab confirmed, 73 deaths and a CFR of 12.48% from 27 states. The same source on 20 May 2016, reported 657 cases with 63 confirmed, 75 deaths from 27 states and CFR of 11.42%.

Hypothesis for Lassa Fever

i) Mass media information processes provide sufficient support towards health education, health promotion and health literacy in the management of LF.

ii) Extent of mass media surveillance campaign on LF correlates positively with the extent of health education and health promotion in the management of LF gained by the public but only done during the peak of outbreaks.

iii) Mass media surveillance information in some areas that are prone to superstitious beliefs like the north east makes no impact on the populace.

Theoretical Framework

Theories and practices are like two sides of the coin: complementary. When one understands the theories, then practical applications are effective. The mass media has been known to guide the publics on issues that are regarded as topical according to their opinion within a given time and it is dependent on the society in question. One of the important functions of the mass media is to bring to the fore burning issues be it political, economic or health. Due to their profession, media people can present issues that are pertinent with regards to its order of importance and high priority.

Occurring issues of importance in Nigeria are mainly insecurity, particularly as it relates to 'Boko Haram' which has been daily reported due to the high number of deaths and its attendant problems, with kidnapping lately becoming equally important. These have found daily prominence in the newspapers and other media. Others include health particularly as it relates to outbreaks of diseases such as the case with Ebola virus disease (EVD) and then Lassa Fever (LF).

As opined earlier, mass media is of paramount importance therefore for the surveillance of the environment to generally ensure safety and survival of the people.

Objectives of the study

(i) To investigate the influence of the print media in the reportage of LF in Nigeria.

(ii) To find out if the print media have positively influenced the publics on LF management.

(iii) To find out if media reportage of health issues particularly as it relates to LF have positively influenced the areas in the North east where superstition still persists.

Methods

Between January 2016 (when the first reported cases of the current LF outbreaks started) and April 2016 (when the cases were no more news item and hence fewer reports), articles about LF were identified in *The Punch, The Nation, The Sun* and *The Guardian* newspapers of Nigeria. These four newspapers are amongst the leading national newspapers in Nigeria. Articles that had the word Lassa fever using some content analysis for ease of analysis was done manually by a single coder with experience in media analysis. In other words, we gave the single coder the different contents to look out for in the LF articles and all newspapers were checked physically for these contents as it was difficult to get all the information on the local newspapers from the Internet.

All topics having LF or related to LF (such as cartoon to depict LF risks) or LF and Ebola were also included in the topics. Recorded contents involved news items (whether as breaking or not), editorials, features,

opinion, health, education, photo of the day and cartoon. The rate of each newspaper publication was calculated as a proportion of the total publication on each category of the publication on LF.

Data analysis method.

The data used were extracted from four Nigerian national daily newspapers. Microsoft Excel 2010 was used for data analysis. Descriptive statistics, such as frequency, percentage, rate and charts were employed to summarize the data.

Ethical consideration

The study was deemed as not human subjects research as only articles in the newspapers were analyzed and so approval was not required by the Institutional Review Board.

Results

A total of 182 newspaper contents had reports on LF out of which 57.1% were news items, 14.8% and 18.7% of these contents were health and front page news respectively. The least reported were opinion (0.5%) and education pages (0.5%). Table 1 shows a summary of the newspaper publications on LF while the specific content areas are listed in Table 2.

Table 1 Summary of four newspaper publications of Lassa Fever in Nigeria (January – April 2016) (%)

News- paper	News	Front Page	Health	Opinion	Editoria l	Metro	Cover	Back page	Cartoo n	Photo of the day	Educati on	Lagos Pulse
The Sun	27	1	4	1	1	1	1	-	-	-	-	-
The Guardian	31	8	8	-	2	2	1	-	-	-	-	-
The Nation	21	14	-	-	-	-	-	-	-	-	-	-
Punch	25	11	15	-	-	-	-	1	2	2	2	1
Total	104	34	27	1	3	3	3	1	2	2	1	1
	(57.1%)	(18.7%)	(14.8%)	(0.5%)	(1.6%)	(1.6%)	(1.6%)	(0.5%)	(1.1%)	(1.1%)	(0.5%)	(0.5%)

Table 2 Rate of newspaper publications by newspaper type and classification of information on Lassa fever epidemic in Nigeria from January to April 2016

Type of newspaper	Reported cases of Lassa fever	Outbreak (Death recorded)	Precaution the public can take on Lassa fever	Preparedness to confront Lassa fever	Risks taken when treating Lassa fever patient	Poor handling of Lassa fever cases	Panic on Lassa fever outbreak	Cost of funding Lassa fever campaign	Funding the eradication of Lassa fever	Other information on Lassa fever
	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Daily Sun Newspaper	9 (34.6)	12 (29.3)	7 (20.6)	5 (10.0)	1 (12.5)	2 (28.6)	-	-	-	-
Guardian Newspaper	4 (15.4)	7 (17.1)	8 (23.5)	18 (36.0)	1 (12.5)	5 (71.4)	5 (100)	3 (100)	1 (100)	-
Punch Newspaper	8 (30.8)	12 (29.3)	16 (47.1)	15 (30.0)	2 (25.0)	-	-	-	2 (100)	6 (100)
The Nation Newspaper	5 (19.2)	10 (24.4)	3 (8.8)	12 (24.0)	4 (50.0)	-	-	-	-	-
Total number of publications	26 (100)	41 (100)	34 (100)	50 (100)	8 (100)	7 (100)	5 (100)	3 (100)	1 (100)	2 (100)

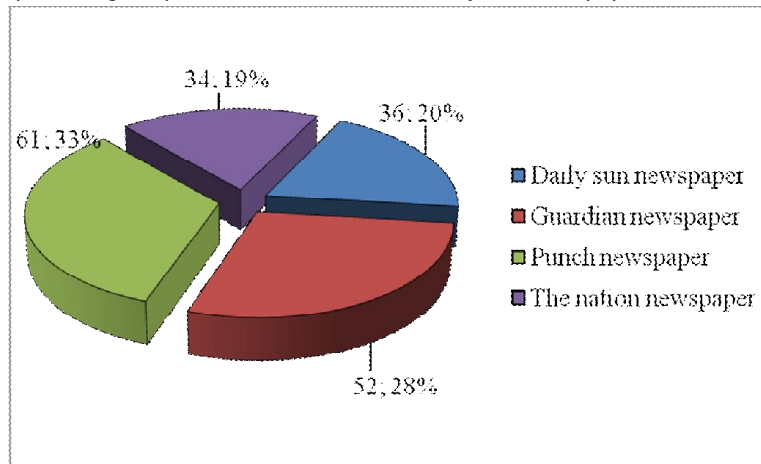
Preparedness and precaution of the public to confront LF was reported the most (46.2%) while reports on LF outbreak accounted for 22% of the report with funding and panic on LF the least reported (1.6%). This study revealed that Punch newspaper published more

articles (33%) on Lassa fever than the other three newspapers which published the remaining two-third of the information on LF from January to April 2016 (Figure 1).

Newspaper publication information on Lassa Fever

A total of 182 articles on Lassa Fever was published in four newspapers from January to April 2016

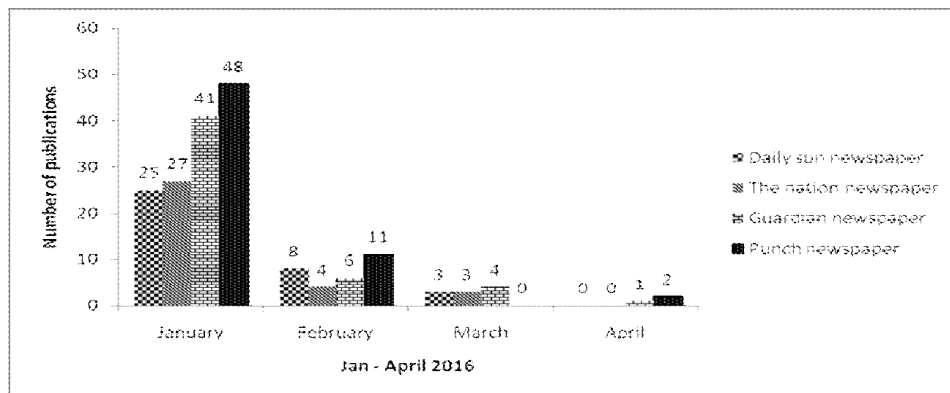
Figure 1 Number and percentage of publications on Lassa fever by four newspapers from January –April 2016



Monthly evaluation of LF publications revealed that Punch newspaper published the most in three months but did not publish any article on LF in the month of March. On the other hand, Guardian newspaper

published articles throughout the period under study (Figure 2) with peaks in January the month of onset of report on LF epidemic.

Figure 2 Monthly evaluation of Lassa fever publications by newspaper type



The month by month assessment of publications on LF showed that majority 141 (77%) of information on LF was published in January while the

remaining 23% was published in February, March and April 2016 (Figure 3).

Figure 3 Month-by-month publications on Lassa fever

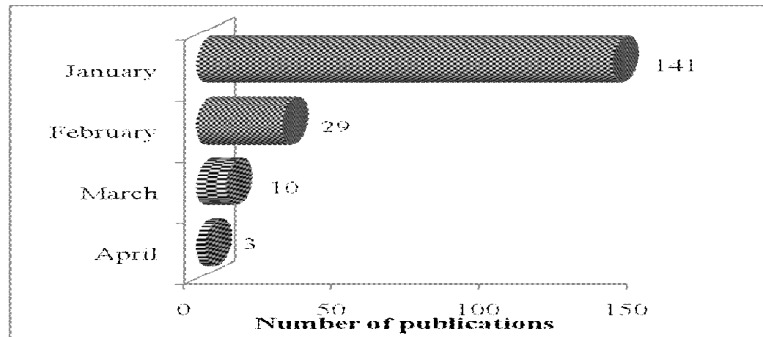


Figure 4 shows the monthly publications on reported cases of LF by newspaper type with all newspapers reporting on LF in January and February

Figure 4 Monthly publications on Reported cases of Lassa fever by newspaper type

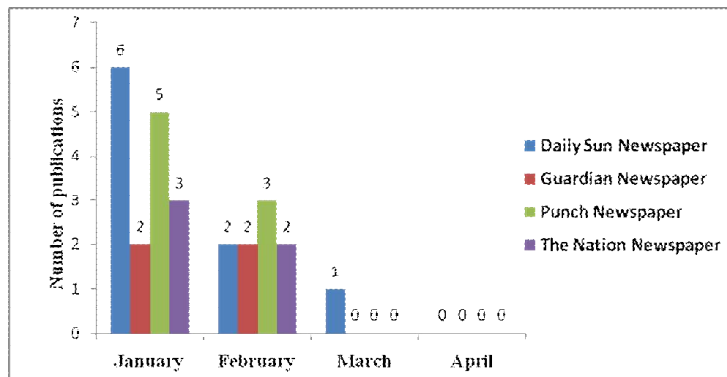


Figure 5 shows the monthly publications on outbreaks (Death rate recorded) by newspaper type.

Figure 5 Monthly publications on Outbreaks (Death rate recorded) by newspaper type

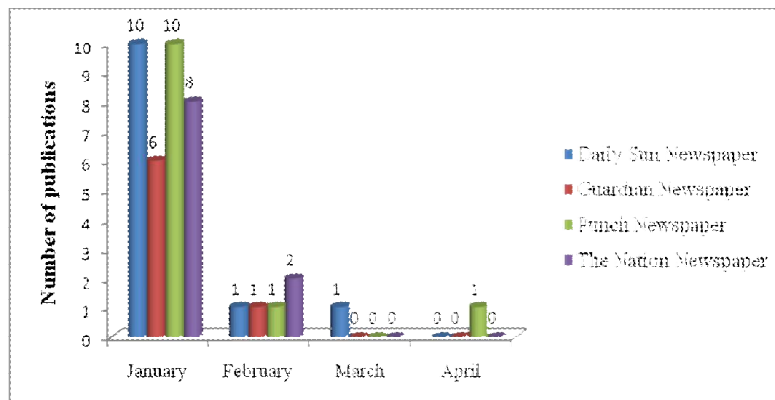


Figure 6 shows the monthly publications on type with the Punch newspapers showing more precautions the public can take on LF by newspaper reportage.

Figure 6 Monthly publications on Precautions the public can take on Lassa fever by newspaper type

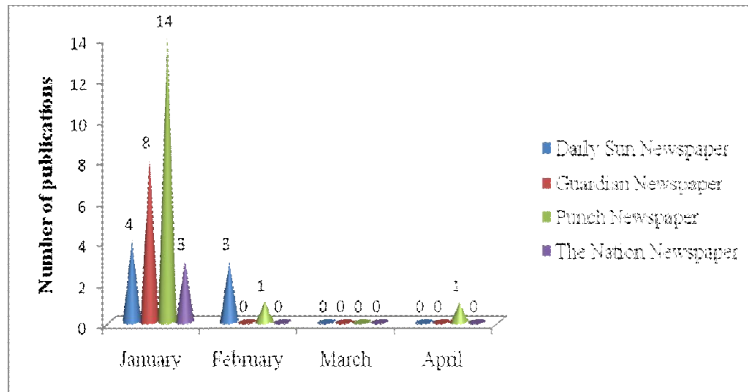


Figure 7 shows the monthly publications on preparedness to confront LF by newspaper type with the Guardian newspapers having more reported cases.

Figure 7 Monthly publications on Preparedness to confront Lassa fever by newspaper type

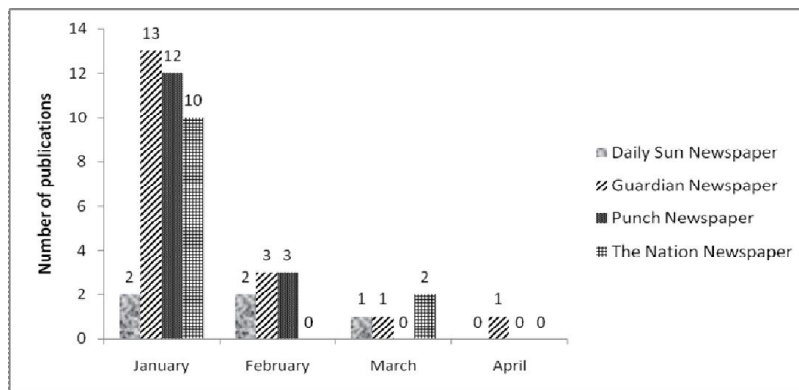


Figure 8 shows the monthly publications on risks taken when treating LF patients by newspaper type with the Nation newspapers having the highest report.

Figure 8 Monthly publications on Risks taken when treating Lassa fever patients by newspaper type

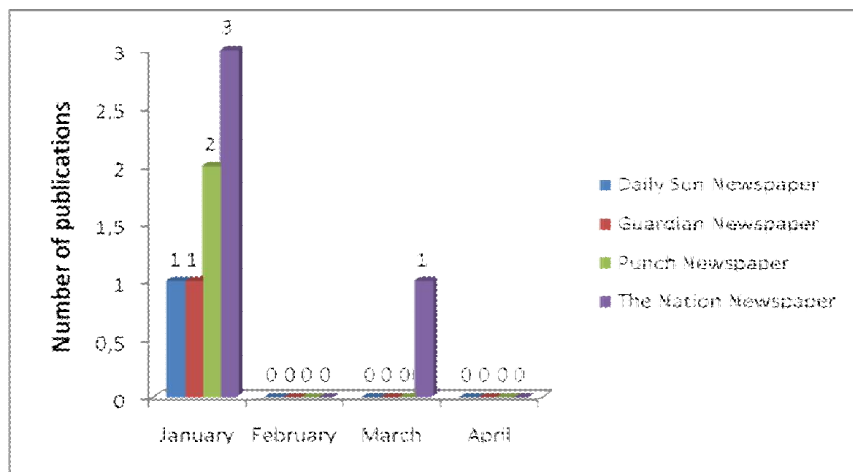
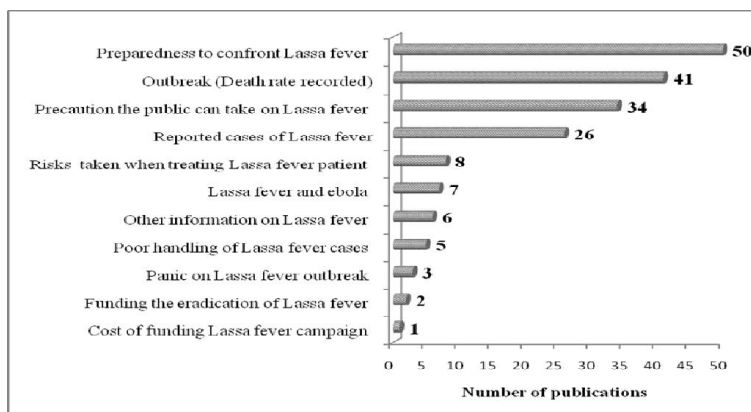


Figure 9 shows the total number of publications by classification of information on LF.

Figure 9 Total number of publications by classification of information on Lassa fever



Discussion

The media plays a role in information dissemination particularly in cases of infectious disease agents occurring at epidemic proportions (Love, Arnesen, & Phillips, 2015). In this study, LF reportage as a news item was in the majority (57.1%) while 18.7% of the reports on LF were front page news. The Nation newspapers had the highest report of LF as front page news (41%) followed by The Punch (32%). Analysis of the newspaper content showed that preparedness and precaution of the public to respond to LF outbreak was the most reported (46.2%) followed by outbreak/death rates recorded (22%) and least of all funding (1.6%). In Nigeria, very little priority has been giving to funding of health research, a similar trend was observed in the

newspaper reportage on Ebola by Smith & Smith (2016). Still on the newspapers' content analysis, comparison of LF and Ebola reportage was only in 3.8%. The idea of the comparison was to enlighten as well as create public awareness on the highly infectious nature of the LF just as Ebola and to advise the public to continue to observe precautionary measures as a lifestyle even when there is no disease outbreak. When the articles on LF were compared month by month, the month of January was the most reported (78.6%) with April being the least reported (1.6%). This trend was not surprising as January was the month the current outbreak was first reported and by the month of April, the disease was almost completely contained. This had actually been the pattern in most newspaper reportage of infectious

diseases as reported by Belo-Osagie (2015) on Ebola virus disease in which 50% of the 6-month reportage was in August, 11 days after the index case came to Nigeria. However, despite the fact that LF had been contained, recent developments including newspaper reports indicate fresh outbreak of LF cases in five states so far.

The Guardian newspaper was the most consistent in its reportage of LF in the four months under study with the Punch newspapers having the highest overall report and The Sun newspapers having the least (Fig 1). Ilesanmi, Omotoso, Alele, & Adewuyi (2015) studied the awareness of LF in a community and concluded that the awareness of LF among members of the community was poor. They however suggested that efforts be made to increase the awareness of the populace through health campaigns and reduction in the spread of both the vector and the virus. Olowookere, Akinola, Olalere, & Adepoju (2014) looked at the diagnostic proficiency and reporting of LF amongst physicians. Their report suggested the importance of improving the knowledge and practices of physicians regarding the diagnosis and reporting of LF. The report stemmed from the disparity observed in the knowledge and practices of physicians regarding the diagnosis and reporting of LF.

Adefisan (2014) studied the awareness of rat as a vector of LF amongst the rural populace of Ijebu North LGA and concluded that both the literate and illiterate rural dwellers irrespective of gender had no knowledge of rat as being a vector of LF. The outcome of the study gave rise to the suggestions that serious enlightenment campaigns on the danger of rats as vectors of LF be intensified among rural people. He further reiterated that efforts be made to enlighten the rural dwellers to avoid spreading of food stuffs along road sides and in the event of illness to patronize clinics.

To buttress the importance of media in the prevention of infectious disease as it relates to LF, a reporter Dare (2012) narrated how his newspaper 'The Daily Trust' was able to move the government to action and distribute 750,000 doses of ribavirin within four days after the story on LF ran. He commented on how their coverage of LF was a significant departure from the reactive reporting of the past, and a demonstration of the life-changing impact good journalism could make. In concluding, he apportioned part of the blame on the Nigerian government for not taking proactive measures to contain the disease.

To further buttress the latter claim by Dare (2012), a journalist, Olawale (2016) reported on how WHO scored Nigeria low in terms of response to LF outbreak with 85% of LF deaths occurring in the West

African region. This led Who to call for availability of more diagnostic tests as a way of preventing deaths.

Primary health care providers were also assessed for their knowledge and attitude towards LF in a suburban Edo community in Nigeria, 38.9% had a poor knowledge of LF (Tobin et al., 2013). The authors concluded that since the primary health care providers were one of the first points of call for persons seeking orthodox medicine, it was essential for them to be adequately informed about the disease. A report by ACAPS (2016) also buttressed the need for proper information and education of health workers following the report of a health worker that refused to treat a suspected LF case. In contrast to the report of Tobin et al., (2013), however, Chollom et al., (2016) opined that although reported cases of LF were on the rise, prompt administration of ribavirin by experienced health care workers may be responsible for the decline in mortality over the years and suggested that improvement on intervention strategies; training, diagnostic facilities should continue to be prioritized.

A post by Adeyemi (2016) disclosed that as at May 3 2016, a total of 272 cases with 149 deaths were reported while another post by Ahmad (2016) of Health Reporters, discussed on the proposed LF vaccine trial in Nigeria.

It has been suggested that for the prevention and control of LF in Nigeria, control of the rodent reservoir, which occurs across Nigeria and beyond is paramount. Reduction of populations of this rodent will require active participation at the village level. This will necessitate mounting a public education program with support of rodent control technicians. This is in addition to community sensitisation including health education and social mobilisation. Preventing entry of rodents into the home and keeping food materials tightly covered are helpful measures to prevent infection (ProMed mail, 2016). To further buttress prevention strategy, a Flickr report by Moore (2016), on proper food storage was also advocated alongside reporting of cases to hospitals. Furthermore, wearing of protective clothing and other sanitation techniques for health workers should be adhered to.

Conclusions

The media has positively played its role in bringing to the fore the awareness of LF and its attendant dangers if precautions are not taken. Clearly, a lot more is needed to be done by the government in terms of its readiness to fund LF research including measures that will reduce and curb re-occurrences of LF in Nigeria. Social groups also need to be involved in creating LF awareness particular amongst the hard to reach areas since there has been continued occurrence

of LF since its' discovery in 1969. Religious organisations need to be mobilized to quell the religious and cultural beliefs about LF in areas such as the north east.

Clearly, there were information gaps in the country and lack of timely information on LF. It is therefore proposed that the newspaper reportage on LF

and other infectious diseases in Nigeria should be a continuum and not only during outbreaks.

Limitations of the Study

The study only looked at print media in the reportage of LF and did not look at LF reportage in the electronic media.

Funding:

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