

REVIEW ARTICLE

Global Killer Ebola: How was it handled by the Indian press?**Sourabh Paul¹, Preetam B Mahajan², Jyotiranjana Sahoo³**^{1,3}Senior Resident, ²Assistant Professor, Department of Community Medicine & Family Medicine, All India Institute of Medical Sciences, Bhubaneswar- 751019, Odisha

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Abstract

Background: World has witnessed many devastating outbreaks in the past and ebola outbreak of 2014 is one among them as WHO declared it as “International public health emergency”. **Aims & Objectives:** To access the coverage of ebola related articles (ERA) in India’s three major English print media. **Material & Methodology:** A cross sectional study was carried out from June 2014 to March 2015 among three leading national English newspapers of India (Times of India, The Hindu and The Telegraph). “Ebola” was used as a search term to identify the ebola related articles (ERAs) in respective websites of the selected newspapers. All the eligible ERAs were entered into a data extraction form (DEF) for content analysis. **Results:** Total number of ERAs published during the study period was 967. Hindu (443) was leading followed by Times of India (390) and Telegraph (134). Majority of the ERAs were concern about ebola (30.3%) followed by ebola related activates (28.9%) and ebola as a disease (26.9%). ERAs were mainly published in international section and in the form of news items and source was mentioned properly (50%). Photograph and Infographics proportion was very minimal. **Conclusion:** In spite of ERAs presence in English print media there is a need to publish more articles of ongoing epidemics particularly on the front pages, from authentic sources and provide richer information that is suitable for the mass population of the country.

Keywords

Ebola; Outbreak; Newspapers; Ebola related articles (ERAs); Content analysis

Introduction

World has witnessed many devastating disease outbreaks in the past. Ebola virus disease having the highest rate of fatality (90%) is one of the four biggest outbreaks in the 21st century. WHO declared 2014 ebola outbreak as “International public health emergency” on 8th August 2014 (1,2). While, 2014 ebola outbreak was rapidly spreading its wings throughout different countries within the Africa Continent, various health agencies were faced but with one question i.e. how to halt the spread of this disease. One of the 5 components of the outbreak response strategy is risk communication among the

public. Risk communication is the process by which national and local government authorities provide information to the public in an understandable, timely, transparent and coordinated manner with the objective of rapid promotion of outbreak control (3).

Being available in all language and accessible to all communities, newspaper enjoys a wide readership all over the world and represents a time-honored means of disseminating printed word information. (4). Globally daily circulation of newspaper is 519 million in 2010 and readership is 2.3 billion that is 20% more than the internet users worldwide (5). In

India according to registrar of newspaper for India (RNI) number of registered newspapers is 82,237 and highest circulating newspaper is in Hindi language (7910) followed by English (1,406) and other regional language in 2010-11. (6). The newspapers have a huge role in disseminating health related information to the general population particularly during crisis.

Aims & Objectives

To access the coverage of ebola related articles (ERA) in India's three major English print media.

Material & Methods

This review was carried out from June 2014 to March 2015. We chose English papers as these are usually read by the policy makers, doctors, people in position to influence healthy behaviors like teachers, NGOs etc. The findings could be useful to influence people from the press as well as the health related sectors to use this mass media more efficiently during epidemics. Here, we referred to all Ebola related articles (ERA) published in three leading national English newspapers of India including the city editions throughout the country. The newspapers included in the study were The Times of India, The Hindu and The Telegraph. As per Indian Readership Survey (IRS) 2013 these three newspapers are among the top five English dailies based on their number in circulation and in that order (6). We used "Ebola" as search term to identify the ERAs in respective websites of the selected newspapers (7,8,9). The results returned after entering the search term included the word ebola either in the heading or within the main body of the article. Utmost care was taken not to include same news twice which was published by the same newspaper in different editions from different city. If the content of any article merely had the word "ebola" in it but was irrelevant from the perspective of creating awareness about the ongoing epidemic of ebola, it was later excluded from the final analysis. All the eligible ERAs were read thoroughly by the researcher and entered into a data extraction form (DEF). This DEF was developed initially based on the findings in first few articles (thirty) of the above mentioned newspapers. DEF included following categories: total number of articles; Content of the articles; Nature of the news: News items/ editorial/ latter to editor/ column/ photograph etc (10); Section of the newspaper: global/ national/ regional etc; Source of news (11); Page of publication;

number of word counts; photograph and info graphics (12). Content analysis was carried out using a reiterative process to understand the message of the article. If there is more than one theme arising from the article, in that case most prominent theme was considered for coding. In this way each article was given a code. Codes were then combined to generate different categories. Descriptive statistics like mean, and proportion was used for summarizing certain quantitative variables like total word count, number of words etc. Analysis was carried out in Statistical package in social sciences (SPSS) version 21. (Licensed version) No ethical issues were involved as information was available in public domain.

Results

Total number of ERAs published during the study period was 967. Hindu (443) followed by The Times of India (390) and Telegraph (134). [Figure 1]

Figure 2 shows the month wise trend of ERA in the selected newspapers as well as the incidence trend of ebola cases globally. 1st ERA reported during the study period was on 7th July 2014 (nearly four month after the epidemic received global attention) (1) in Times of India. Next day both Hindu and Telegraph published articles on ebola.

Content analysis of the ERA has shown that major categories of the published articles were concern about ebola (30.3%) followed by ebola related activates (28.9%) and ebola as a disease (26.9%). All the three newspapers maintained the similar trend while publishing the articles. [Table 1, Table 2]

Among different section of newspapers international section published more than half of the ERA followed by national (21%) and regional section (14.2%). All the three newspapers individually also followed the similar trend except Times of India where regional section (28%) published more ERA compared to national section (17%). Times of India published 14% of ERA in other sections of the newspaper but it was very minimal in case of other two newspapers.

[Figure 3]

Above table shows that most of the ERA (>90%) were published as news item compared to editorial, opinion etc. Nearly half of the ERA was published from different news agencies. Among them majority was from Associated Press (AP) – 12%, Agence France Presse (AFP)-10.1%, Asian News International (ANI)- 9.2%, Indo-Asian News Service (IANS) -6.7% etc. The above table also shows that more than 10%

of the ERA was published from anonymous sources. Among the individual source most common was staff reporter. Similar trends were maintained for all three newspapers individually except for Times of India where individual reporting was more than 50%. Anonymous source publication was very minimal for Telegraph (3%) compared to other two English dailies. [Table 3]

Total number of word count for ERAs in all the three newspapers were 2, 50,113. Maximum words were used in the Hindu (132,765), followed by Times of India (84,590) and Telegraph (32,758). Median word count for the Hindu were [251 (range 28-2717)] followed by Times of India [190 (range 23-921)] and telegraph [94 (range 13-2014)]. Word count less than 500 for the newspapers (Hindu, The Times of India & Telegraph) were 88.3%, 95.9% and 83.6% respectively.

Proportion of articles with photographs present along with it was 49%, 29.5% and 20.8% respectively for Hindu, Times of India & Telegraph. But infographics proportion were very few i.e. 10.1%, 6.2% and 7.1% respectively in these newspapers.

Hindu published more than 10% of the articles in each of the following pages: page no -9, 15, 16 & 24. The Times of India (TOI) did not have any such preference for particular page as none of the page published more than 10% of the total articles. Major ERA contributing pages in TOI were, Pages 4, 11, 14 and 15. In Telegraph, page no 2 and 3 together featured nearly 70% of the ERAs.

Discussion

Information plays a fundamental role in every disaster or public health emergency. Major emerging and re-emerging diseases prevention and control depends heavily on public awareness. Mass media is probably the single most important source of health information for the general public. (13, 14).

Present study shows that in spite of zero reporting of confirmed Ebola case, ERAs regularly featured in the three leading national English print media. Though circulation size of newspaper was highest for Times of India but ERA was featured maximum in Hindu. The trail of first case during 2014 outbreak could be traced to events that occurred in the month of December 2013 in a village of Guinea (1) but during the 1st six months of 2014 Ebola's presence in national English print media was marginal. As pointed out by Trevor Cullen that media coverage of Ebola was very marginal in spite of 33 outbreaks

since 1976 (15). As the disease progressed in 2014, Ebola did get international recognition. Most ERAs featured in August and October 2014, while the disease incidence still showed rising trend and peaked around November 2014. Probably editors of the newspapers thought that after the initial thrust in the month of July 2014 the disease will come down or people will lose interest in this disease, but in reality it continued to progress so perhaps they started reporting again on Ebola. A study conducted among four leading newspapers of Nigeria had shown similar pattern during the six month study period with more than 50% of the total media coverage on ERA in the month of August 2014 (16). A study by Cynthia B. *et al* has also found that Google news search on Ebola was maximum in the month of July and August 2014 (17). Perhaps this was the time Ebola was appearing to be a major international concern.

Content analysis revealed that most of the ERAs were equally distributed within the three broad topics "concern about Ebola", "Ebola related activities" and "Ebola as a disease". Among "concern about Ebola" commonest theme was to raise fear about the disease. Similarly, within "Ebola as a disease" category the primary focus was on the death toll or morbidity of the disease. Screening at different entry points was most common news item in the category of "Ebola related activities". A large proportion of the country's population was concerned about being infected with Ebola so articles about fear, case load and death toll were published excessively. Minimal representation about hazards involved during International travel to high risk areas showed the lack of vision within the editors in creating awareness about safety matters and sensitizing the policy makers towards appropriate action, even though the national dailies have sufficiently justified their social responsibility of informing the public about the outbreak of EVD and revealing precautionary measures to curtail the spread. A study by Fifa G on ebola virus (EVD) through the lenses of news articles has shown that all the four selected newspapers (two western and two African) had failed to report in terms of care communication in order to raise awareness (18). Internationally many countries have already reported ebola cases so main focus of mass media would be on how to treat, diagnose and reduce the spread of the disease. On the other hand, as India had not reported any confirmed case of ebola, the

focus should have been on prevention strategies. Fifa G *et al* (18) reported that newspapers in Africa as well as Europe have published ERAs relevant to their political social and cultural factors. Similarly, another study containing two newspapers, one each from Canada and Nigeria also had shown that there is difference in reporting of the similar event of ebola consider interest of the readers of two different country (19).

Most of the ERA articles published in the news item section reflected what was happening in the society. During the time of outbreak, daily situation report, epidemiological statistics and guidelines by national and international organization etc were published as eye catching news items. A report of WHO has shown that local data are represented more by media during outbreak to make the story relevant to the readers (14). Articles in editorial, letter to editor and opinion section are mainly designed for the readers to think critically about the matter which were lacking in the three selected national dailies of India. Similarly, a study conducted in Nigeria has also shown that Nigerian newspaper did not attach much significance to coverage of ERA in comparison to other news items related to insecurity, politics etc (16).

Maximum ERA articles were related with international news so source of the news were from different international agencies. Very few ERA articles were written by health experts on the topic. A content analysis study by Clement Akram (20) has shown that almost all of the ERA articles had cited the source of the news but in our present study almost 10% of ERA had from anonymous source. Editors of the newspapers can improve the authenticity of the articles in future if they are little more careful in reporting the source. Present study has also found that in Times of India half of the ERAs source was staff reporter. It shows that though ebola related news was collected from different international agencies but while citing it was modified according to the interest and relevance of the readers of the newspaper by their reporters.

In our present study median word count of the three newspapers was 217 (range 13-2717) where as a study by Corey H Basch *et al* (21) among three US dailies was 767 (range 67-1745). Thus US newspapers attached more significance to ERAs. More than 80% of the ERA in three Indian newspapers was less than 500 words. It is understandable that much significance was not

attached due to absence of disease in India. But this opportunity could be utilized to highlight preparedness of our health system towards Ebola as well as other diseases in the country that killed more people than Ebola at that moment like dengue etc. Analysis of location of ERAs in the newspaper revealed that only 12 (1.2%) of the ERAs found place on the front page. Another study among Nigerian newspapers has shown that 11% of the ERAs were published on front and back page (16). Though there is no evidence to support, but most readers usually glance through the front and back pages particularly while gazing at the papers being read by the neighbors in public places or travelling through public transport system.

Nearly 2/5th of the ERAs had photographs or pictures related to Ebola and maximum were found in The Hindu (49%). Sometimes photographs capture attention better than words. For purpose of prevention and creating health awareness info graphics could have been more useful to readers rather than the simple photographs about the event. Info graphics seemed to be underutilized.

Conclusion

Worldwide during the last 30 years more than 30 new pathogens have been detected (14) and during outbreak media is the most powerful source for providing first-hand information. Media is an extremely important channel to reach out to people with information in a comprehensible and credible manner.

Recommendation

There is need to engage the news editors, the media decision-makers, so that they understand and encourage a greater focus on publishing articles on ongoing epidemics particularly on the front pages, from authentic sources and provide richer information that is suitable for the mass population of the country and in consultation with public health authorities in areas of creating awareness regarding prevention and control of the ongoing disease.

Limitation of the study

In content analysis coding of the ERAs were done by single researcher only.

Relevance of the study

This study shows that how newspapers can be utilized for health promotion during epidemic or outbreak.

Authors Contribution

All the authors had made substantial contributions to conception, design, data collection, analysis and interpretation of data; drafting the article, revising it critically for important intellectual content; and final approval of the version to be published.

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Tables

TABLE 1 CODES UNDER DIFFERENT CATEGORIES

Categories	Codes
Concern about ebola	General concern, financial concern, cultural concern, concern about sports, India's concern, expression of fear, criticism, Jokes
Ebola related awareness	Health education on ebola, educational activity on ebola, health message, ebola talk, ebola educational tools, ebola Do's & Don'ts, FAQs on ebola
Activities related with Ebola	Ebola preparedness, ebola screening, ebola surveillance, preventive activities by government & Nongovernmental organization (NGO)

Travel related issues of Ebola	Ebola & visa problem, ebola and international tourism
Ebola as a disease	Pathogenesis, diagnosis, drugs, vaccine, epidemiology, mortality, morbidity
Ebola and health professionals	Ebola among health professional and the consequences, health professionals travelling to ebola affected countries to fight ebola

TABLE 2 DIFFERENT CONTENT OF THE ERA

Categories	Hindu	Times of India	Telegraph	Total (%)
Concern	117	134	42	293(30.3)
Awareness	41	22	8	71(7.4)
Activates	139	101	40	280(28.9)
Travel related issues	1	4	0	5(0.6)
Ebola as a disease	111	116	33	260(26.9)
Ebola and health professionals	34	12	11	57(5.9)

TABLE 3 COMPARISON BETWEEN TYPE OF ITEMS AND SOURCE OF NEWS BETWEEN THE NEWSPAPERS

Variable	Hindu	Times of India	Telegraph	Total (%)
Type of ERA				
News item	409 (92.3)	378(96.9)	134(100.0)	921(95.2)
Editorial	7(1.5)	7(1.9)	0(0.0)	14(1.4)
Opinion	24(5.4)	3(0.7)	0(0.0)	27(2.8)
Others	3(0.6)	2(0.5)	0(0.0)	5(0.6)
Source of ERA				
Agencies	255(57.6)	108(27.7)	105(78.4)	468(48.4)
Individual	151(34.1)	199(51.1)	25(18.7)	375(38.8)
Not available	37(8.3)	83(21.2)	4(3.0)	124(12.8)

Figures

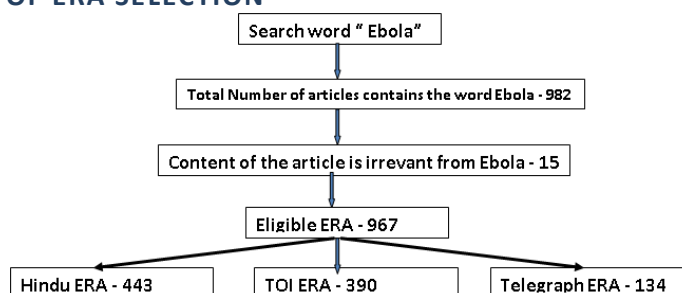
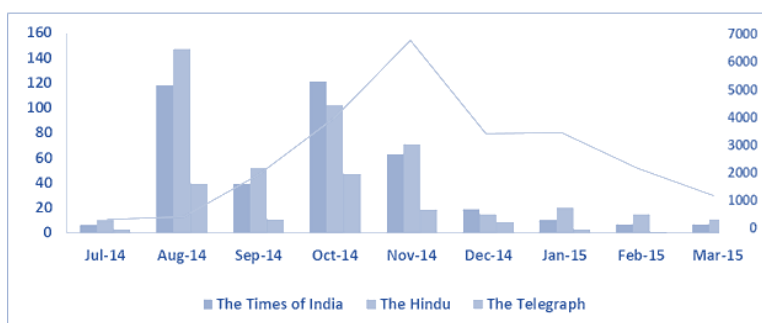
FIGURE 1 FLOW CHART OF ERA SELECTION**FIGURE 2 COMPARISON OF NEWSPAPER WISE NUMBER OF ERA AND GLOBAL INCIDENCE TREND OF EBOLA CASES**

FIGURE 3 COMPARISON OF ERA ACCORDING TO SECTION OF NEWSPAPERS