

## THE COVERAGE OF DENGUE AND ZIKA IN SELECTED MALAYSIAN NEWSPAPERS: AN ANALYSIS OF BERITA HARIAN, UTUSAN MALAYSIA AND THE STAR

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### ABSTRACT

This study is aimed to analyze the coverage of news on dengue and zika in three mainstream daily Malaysian newspapers i.e. *Berita Harian*, *Utusan Malaysia* and *The Star*. The data for this study were collected from the print version of these newspapers for a period of a month i.e. November 2016. The newspapers were selected due to their circulation figures and they were also circulated nationwide. It is important to note that dengue and Zika are mosquito borne diseases or epidemics and they are spread by *Aedes* mosquito species. While dengue is regarded as health threats for decades in Malaysia, the first case of Zika infection was recorded quite recently, i.e. 31 August 2016. This study is significant in order to understand how the newspapers reported the news on dengue and Zika in helping the readers to be well informed on mosquito borne diseases and enhancing awareness of the diseases among Malaysians. The news or feature articles from the *Berita Harian*, *Utusan Malaysia* and *The Star* were analyzed using thematic analysis, focusing on the expressions or phrases and other news elements used by the newspapers to report the epidemics. The findings of the study showed that there were several common themes in the news or feature articles on dengue and Zika epidemics published by these newspapers.

**Keywords:** dengue; Zika; health information; newspaper; diseases.

### INTRODUCTION

Many scholars regarded the usage of mass media as significant in disseminating health-related information in order to reach a wide audience. In the context of Malaysia, communicating health-related information, such as notifications and warnings on deadly and communicable diseases, using interpersonal face-to-face communication would not be as effective as compared to using mass media due to many factors such as the distance of coverage, human resources and cost.

## MASS MEDIA AND HEALTH INFORMATION

The mass media have been used by relevant health organizations or government agencies for communicating health information to the public (Calvert & Cocking, 1992; Catalán-Matamoros, 2011; Dominick, 2013; Dorfman, 2003; Larson, 1991; Peng & Tang, 2010; Picard & Yeo, 2011; Ungar, 1998). Dorfman (2003) opined that not only the media are significant in disseminating health-related information to the public and they also influence public perceptions and understandings of health. For example, in the context health promotion, Catalán-Matamoros (2011, p. 399) wrote, “Mass media campaigns have usually been one element of broader health promotion programmes with mutually reinforcing components ... Informing and educating the public, but also setting the agenda for public debate about the health topic...” Dominick (2013, p. 33) opined that mass media could cause “unnecessary anxiety”, if the reports are not based on scientific evidence or merely based on speculations or if the news are distorted or misleading. In this regard, Baker (2016, p. 275) said, “There is a delicate balance between providing important health information and scaring the public.”

Based on their analysis of media coverage of medical and health information in Britain, Picard and Yeo (2011, pp. 5 & 6) stated that parties involved and experts in health industry, such as medical officers, “... often complain that the usual media approach produces misperceptions and wrongly frames medical and health information ... news coverage as being limited, skewed, and emphasising conflicts and risks. They often place responsibility for this on journalists’ selection and presentation of experts”. In order to ensure reliable and accurate news reports on health-related issues, Smith and Smith (2016) suggested that the journalists or media practitioners to conduct more interviews with the subject matter experts. Based on their systematic content analysis of online health information, McCaw, McGlade and McElnay (2014, p. 2) wrote, “Using inaccurate or misleading health information for decision making purposes, without expert advice, could potentially have a serious negative impact on the individual user and on public health in general.”

The public’ responses and understandings of published health-related information are, to a certain extent, influenced or determined by how the information is reported or presented. According to Picard and Yeo (2011, p. 3), “The importance of medical and health news and information is recognised by medical researchers and practitioners and journalists; however, they view media news reports and practices through different lenses coloured by their professions and professional practices.” Picard and Yeo (2011, p. 5) also mentioned further that the news affect audience’s choices and behaviours, which “have implications for personal health, family health, and community health”. With regard to the news approach, Smith and Smith (2016, p. 94) wrote that the media practitioners should be aggressive and proactive in covering epidemic outbreaks by conducting “continuous and reportage ... so as to help inform, educate and prepare the populate about infectious diseases and emerging urgent public health issues...” For instance, based on their study of health promotion on television programmes, Calvert and Cokcing (1992, p.

144) found that content and form of television presentations, such as comprehensibility of the message, influence audience's attentional decisions.

Based on the past studies, it can be said that the relevant health authorities had employed the mass media, including newspapers, comprehensively to disseminate or communication health-related information to the public due to many factors such as the potential of having a wide coverage. In the context of disease outbreaks such as dengue and Zika, the approaches employed by the newspapers or news agencies in reporting the news would depend on the type of their targeted audience as well as the nature or status of the outbreaks.

## **DENGUE AND ZIKA IN MALAYSIA**

Dengue and Zika are regarded by World Health Organization (WHO) as global health threats (McKie, 2016; Sikka, Chattu, Popli, Galwankar, Kelkar, Sawicki, Stawicki, & Papadimos, 2016; Tambo, Chisseu, Ngogang, & Khater, 2016; Van Loock, 2016). For instance, Van Loock (2016), based on his research on infectious diseases including dengue, stated, "The dengue virus is transmitted primarily by the *Aedes aegypti mosquito*. It's a real and present danger in almost all tropical and subtropical regions: It's already one of the leading causes of hospitalization and death among children in certain countries of Asia and Latin America. And the number of cases is increasing as the disease spreads to new areas and outbreaks become more common". On 24 November 2016, WHO officially downgraded the risks of Zika (WHO downgrades Zika, 2016) after issuing a global health emergency in February 2016 (Baker, 2016).

Compared to dengue, which has been around in Malaysia for decades (Abd Kadir, Mohamed, Ab Rahman, 2015; Mudin, 2015; Shafie, Roslan, Ngui, Lim, & Sulaiman, 2016), Zika is a recent epidemic where the first case of Zika infection was recorded on 31 August 2016 (Klang woman is first, 2016). In the case of dengue fever, the first outbreak was recorded in 1962 (Mudin, 2015, p. 5). Both diseases are spread by an *aedes aegypti* mosquito or better known among Malaysians as aedes (Aziz et. al, 2016; Tambo et. al, 2016). According to Abdullah (2017), the Director-General of Health Malaysia, there were 10, 482 dengue cases from 1 January to 21 January 2016, with 23 deaths. On the other hand, there were only eight positive Zika infections reported from 1 September until 31 December 2016. Based on the number of reported cases, dengue is still the main threat. Thus more efforts are taken by rightful authorities to prevent and control dengue.

Due to the existence of Zika in 2016, the Malaysian health agency used a new slogan in their preventive campaigns that reads "No Aedes, No Zika and Dengue" (Abdullah, 2017). In the past, the slogan was "No Aedes, No Dengue". Unlike Zika, which was announced by WHO as no longer a global health threat on 20 November 2016, dengue continues to be major health issue to Malaysia. Thus, the health authorities, especially the Ministry of Health Malaysia, issue continuous notifications of the danger of dengue and organize campaigns to enhance public' understanding and to change public's negative

attitude towards the disease. More often than not, the information is disseminated through the mainstream mass media.

## METHODOLOGY

This study employed thematic analysis as the method for analyzing the qualitative data. Braun and Clarke (2006) stated that thematic analysis is a method for analyzing qualitative data that focuses on dominant themes or may be unique themes in the data. Braun and Clarke (2006) mentioned, “the ‘keyness’ (*sic*) of a theme is not necessarily dependent on quantifiable measures – but rather on whether it captures something important in relation to the overall research questions” (p. 82). This study employed document analysis as the method for collecting the data. Holsti (1969, p. 2) mentioned, “Nearly all research in the social sciences and humanities depends in one way or another on careful reading of written materials”. Scholars such as Rice and Ezzy (1999) and Kellehear (1993) considered this method as an unobtrusive technique that permits for an analysis of the actual rather than the reported attitudes. In this study, the data were news and/or feature articles collected from three mainstream Malaysian newspapers i.e. *Berita Harian*, *The Star* and *Utusan Malaysia*. The data were collected for a period of one month, i.e. from 1 November 2016 to 30 November 2016. This study analyzed several components of news publication such as the phrases or expressions used by the journalists or newspapers, sources of information and the placement of the news.

The main reasons for selecting these newspapers were their circulation and the type of news published by them. *The Star*, *Utusan Malaysian* and *Berita Harian* are among the most highly circulated mainstream newspapers. *The Star* is the most highly circulated among the English newspapers whereas *Utusan Malaysia* and *Berita Harian* are among the most read Malay newspapers (The Star is top circulated, 2016). In term of ownership, *The Star* is a property of The Star Media Group (The Star, 2017); *Utusan Malaysia* is owned by Kumpulan Utusan (Utusan Malaysia, 2017), whereas the New Straits Times Press (M) Berhad owns *Berita Harian* (Berita Harian, 2017). In term of content, the selected newspapers publish serious and fact-based news, rather than merely trivial news, gossips, sensationalized news or speculations. Despite their threat or their deadly nature, in a period of 30 days, there were only 17 articles on dengue and Zika, reporting cases or incidences in Malaysia or other countries: (1) *The Star* – 7, (2) *Berita Harian* – 7, and (3) *Utusan Malaysia* – 3. Based on the small number of articles, it could be postulated that information or story of dengue and Zika had no element of newsworthiness. A little newspaper coverage on dengue might be due to the commonness of the disease, i.e. dengue, since there were so many cases and Malaysians were no longer interested to read or learn about it (Abdullah, 2016).

Table 1: No of Articles on Dengue and Zika

Newspaper	Articles on Diseases	
	Dengue	Zika
<i>Berita Harian</i>	4	5
<i>The Star</i>	6	3
<i>Utusan Malaysia</i>	3	0
<b>Total</b>	<b>13</b>	<b>8</b>

Among the headlines of the collected articles are:

- a. Poor response to dengue exhibition (Kathleen Michael, *The Star*, 1 November 2016, *Starmetro*, p. 6)
- b. Mangsa pertama virus zika beransur pulih – *First zika victim is recovering* (*Berita Harian*, 5 November 2016, *Isu*, p. 29)
- c. WHO downgrades Zika risk. (AFP, *The Star*, 20 November 2016, *World*, p. 43)
- d. WHO umum zika bukan lagi ancaman – *WHO announces zika is no longer a threat* (AFP, *Berita Harian*, 20 November 2016, *Duina*, p. 42)
- e. Kesedaran cegah denggi warga KL, Putrajaya masih rendah – *The awareness on dengue preventions among the residents of KL, Putra is still low* (Nur Fatin Mohd Satar, *Berita Harian*, 21 November 2016, *Wilayah*, p. 24)
- f. Kikis sikap sambil lewa tentang denggi – *Get rid of the couldn't careless attitude about dengue* (Rabiatul Adawiyah Koh Abdullah, *Utusan Malaysia*, 13 November 2016, *Kesihatan*, p. 27)

Based on the data analysis, there was more news on dengue compared to Zika (refer to Table 1). One of the possible explanation for the big gap of coverage because dengue was regarded as locally originated whereas Zika was brought into the country by Malaysians who returned from other countries especially Latin America or came into contact with them and the number of cases was only eight, which is very insignificant. Therefore, Zika is not seen as threatening as dengue. In terms of news on diseases, dengue was reported in 13 articles on dengue whereas there were eight articles on Zika. In some cases, the newspapers published news or information on dengue and Zika in the same articles because *Aedes* mosquitos spread both diseases. The following section presents the findings and discussion of this study.

## FINDINGS AND DISCUSSION

This study amassed a total of 17 news and feature articles on dengue and Zika-related information, which signified a low publication frequency relating to the epidemics. The majority of the articles are from *Berita Harian* and *The Star*. There was no reportage of Zika in *Utusan Malaysia*, as compared to the other newspapers. The discussion of the findings is structured according to three main themes i.e., news content, positioning of articles and sources of information.

## News Content

The findings of the study showed most of the articles provided basic and most relevant information about dengue and Zika. The emphasis of news was on the causes of the diseases, preventive measures, challenges and expected actions to be taken by the public, and health campaigns by the health authorities or agencies. In this context, the newspapers helped the government agencies and other relevant organizations to provide the needed information and enhanced the level of awareness among Malaysians. This is consistent with the observations or findings of the previous studies where the media had role to play in communicating health-related information to the public (Catalán-Matamoros, 2011; Dorfman, 2003; Picard & Yeo, 2011). For instance, many articles emphasized on the preventions and advice from the health-related authorities that should be followed by the public such as taking care of the cleanliness of their surrounding. This is to avoid their houses and the surroundings from becoming mosquito breeding grounds. Similar news content or emphasis could be found in all of the selected newspapers. This is clearly indicated in the following excerpts:

An attempt by Hulu Langat District Health Department to educate residents of Taman Sri Bahagia, Cheras, on *Aedes mosquitos* and *dengue* fever received poor support from the target audience. Only about 20 residents turned up to view the mini dengue exhibition set up the department next to Sri Bahagia Court. ... The exhibition highlighted *dengue* fever symptoms and ways to avoid getting bitten by the disease-bearing mosquito. Briefing residents and answering their queries was public health officer Aman Akhir, who showed samples of larvae caught and the growth process of *Aedes mosquito*es from egg to adulthood. (Kathleen Michael, The Star, November 1, 2016)

Wanita berusia 58 tahun dari Bandar Botanik, Klang, yang juga mangsa pertama di negara ini *dijangkiti virus zika* (58-year-old woman from Bandar Botanik, Klang ... first victim infected zika virus in the country) pada hujung Ogos lalu, sudah beransur pulih. Perkara itu dimaklumkan oleh Pengerusi Jawatankuasa by tetap Kesihatan, Kebajikan, Hal Ehwal Wanita and Keluarga negeri, Dr Darroyah Alwi, pada sidang DUN, di sini, semalam. ... Tindakan pantas oleh pelbagai pihak seperti Pejabat Kesihatan Daerah (PKD) Klang dan Majlis Perbandaran Klang dalam melaksanakan *aktiviti kawalan dan pencegahan berjaya mencegah penularan zika* (controlling and preventing activities to prevent the spread of zika). (Berita Harian, November 5, 2016).

Meskipun kesedaran tentang denggi tinggi, sikap negatif tentang gejala ini masih lagi wujud. Masyarakat umum

kemungkinan menjadi lali terhadap kesan *jangkitan denggi* (*dengue infection*) dalam kehidupan, keluarga and komuniti mereka apabila ancaman penyakit ini masih terus dipandang ringan. (Rabiatul Adawiyah Koh Abdullah, Utusan Malaysia, November 13, 2016)

The findings of this study indicated that there was a standard approach for reporting health-related information, including dangerous epidemic, among the selected Malaysian mainstream newspapers. Unlike the reportage of the other type of news, which sometimes was sensationalized or opinionated, the coverage on dengue and Zika was found to be straightforward and not loaded with scientific jargons or explanations.

### **Positioning of Articles**

The finding of the study showed that some articles were not positioned among the most important news, as compared to the other types of news such as crime stories, and politics, despite the fact that dengue and Zika are regarded as a major health threat. This indicates the level of priority given to the health-related information by the selected newspapers. This is evident in the following news excerpt, which is also a very short article placed on page 8 of Nation section of *The Star*, dated November 21, 2016:

A total of 92,891 *dengue* cases with 214 *deaths* was recorded nationwide from January to November this year compared with 106,757 cases and 293 deaths within the same period of time last year. Deputy Health Minister Datuk Seri Dr Hilmi Yahaya said this was a decrease of 13% or 13,866 cases. “Selangor is a major contributor at 51.3% or 47,257 of the total number of cases,” he added. He said this after launching the Selangor state-level Mega Integrated Gotong-Royong Programme against Aedes at Gugusan Tanjung in Section 6, Kota Damansara, yesterday. He said Gugusan Tanjung was chosen as it had recorded 51 *dengue cases* from January to November this year compared to three cases in the same period last year.

Compared to the other types of news such as entertainment and politics, health-related information only attract a certain group of readers, which might not contribute significantly to the sale of newspapers or the circulation. Consequently, news on health issues would not be given the priority or prominence and any news on infectious diseases would not be placed among the main news or cover story or the first few pages, unless the situation is very bad and involves many victims or death case.

### **Sources of Information**

Based on the analysis, the sources of the information for most the articles were officers from local councils, medical officers, medical experts, or ministers

from the relevant health authorities especially from the Ministry of Health Malaysia. The journalists from the selected newspapers functioned solely as the information disseminator. In other words, the journalists or reporters acted as mediator between the rightful health authorities and the public or readers. Among the sources of information about dengue and Zika cited in the articles were Minister of Health, Datuk Seri Dr S Subramaniam, Deputy Health Minister Datuk Seri Dr Hilmi Yahaya, and Director-General of Health Datuk Dr. Noor Hisham Abdullah. In many articles, the information was presented in the form of direct quotations from the relevant authorities or their representative in order to ensure the news accuracy and to maintain public trust. The following quotations clearly illustrate this finding:

Sebanyak 119 kompaun dikeluarkan oleh Kementerian Kesihatan terhadap premis barang lusuh atas kesalahan membiarkan *pembiakan nyamuk (mosquito-breeding)* dalam operasi khas di seluruh negara pada 8 November lalu. Ketua Pengarah Kesihatan [*source of information*: Director-General of Health], Datuk Dr. Noor Hisham Abdullah berkata ... “Operasi penguatkuasaan ini merupakan susulan daripada operasi sama yang dijalankan pada 12 Mei lalu. ... Operasi ... akan dilakukan secara berterusan bagi membendung peningkatan kes *denggi (the operation ... will conducted continuously in order to prevent more dengue cases)*,” katanya. (Utusan Malaysia, November 24, 2016)

The occupants of a house in Kampung Pasir Pinji here face court action if they fail to clean up their residence, which has 29 *Aedes mosquito-breeding* areas. State Health Department director Datuk Dr Juita Ghazalie [*source of information*] said the occupants were given notice to clean their house within seven days. ... Dr Juita said inspections were carried out by health officials at about 4pm following three cases of *dengue* reported in the village. (The Star, November 16, 2016)

Kerajaan belum meluluskan vaksin *denggi* pertama di dunia (*government has not approved the first dengue vaccine in the world*) digunakan di Malaysia kerana tiada maklumat mengenai keberkesanannya kepada pesakit berusia 18 tahun ke atas. Menteri Kesihatan, Datuk Seri Dr S Subramaniam [*source of information*: *Minster of Health*], berkata ujian ke atas vaksin berkenaan sebelum didaftarkan hanya dilakukan ke atas mereka yang berusia antara Sembilan hingga 18 tahun. (Berita Harian, November 4, 2016)

This finding supported the suggestion made by Smith and Smith (2016) where they opined that more interviews should be conducted with the experts and knowledgeable people, in the area of communicable diseases, to better educate the citizens about pressing health issues. This is very important to ensure the credibility of the information.



## CONCLUSION

The findings of the present study indicated that newspapers, especially the widely circulated ones, could become a significant medium in communicating important health-related information and updates of the epidemics such as dengue and Zika. One of the reasons is that the public regards the newspapers as one of the important sources of information. The public's responses towards the diseases could be changed and their understandings could be enhanced if the information is presented or reported in the right manner and based on scientific evidence from the rightful health authorities.

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