University of Vermont ScholarWorks @ UVM

University Libraries Faculty and Staff Publications

University Libraries

7-22-2019

Small But Mighty: Letters-to-the-Editor Published on the Zika Virus, 1952 - 2018

Frances A. Delwiche University of Vermont, fdelwich@uvm.edu

Follow this and additional works at: https://scholarworks.uvm.edu/libfacpub Part of the <u>Health Sciences and Medical Librarianship Commons, Infectious Disease Commons,</u> <u>Scholarly Communication Commons, and the Scholarly Publishing Commons</u>

Recommended Citation

Delwiche, Frances A., "Small But Mighty: Letters-to-the-Editor Published on the Zika Virus, 1952 - 2018" (2019). University Libraries Faculty and Staff Publications. 74. https://scholarworks.uvm.edu/libfacpub/74

This Poster is brought to you for free and open access by the University Libraries at ScholarWorks @ UVM. It has been accepted for inclusion in University Libraries Faculty and Staff Publications by an authorized administrator of ScholarWorks @ UVM. For more information, please contact donna.omalley@uvm.edu.

Small but Mighty: Letters-to-the-Editor Published on the Zika Virus between 1952 and 2018 Frances A. Delwiche, MLIS, Dana Medical Library, University of Vermont, Burlington, VT, USA

Background and Objective

Letters-to-the-Editor are an overlooked and undervalued publication type, known primarily as a means through which readers formally respond to a publication in a scholarly journal. Letters-to-the-Editor may also be used to disseminate field observations, clinical findings, and the results of research projects.

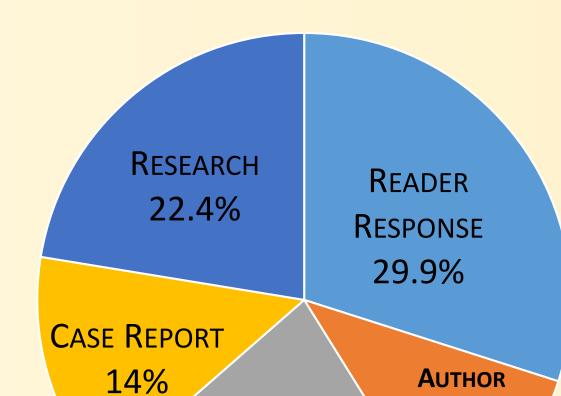
Most Letters-to-the-Editor fall into one of five major categories: • **Reader Response** to an article published in a scholarly journal



Results

Prior to the 2015-2016 Zika Virus epidemic, very few Reader Responses and/or Author Replies were published. As the epidemic evolved, the absolute number of Letters exploded, and the percent of Reader Responses increased from 6.7% pre-2016 to 36.6% in 2017. In 2016, at the height of the epidemic, 65.2% of the Letters published were other than Reader Responses or Replies, including 66 Observations, 42 Case Reports, and 51 Research.

Categories of Letters



OBSERVATION

22.4%

Of the 499 Letters in the study:

REPLY 11.2%

- **Reply** by the author of the original article, addressing the points raised by the response Letter.
- **Observation** written to raise awareness of potentially important phenomena
- **Case Report** highlights the unique characteristics of one or more specific patient(s)
- **Research** conveys results of small research studies or preliminary data

Man Writing a Letter (1662-1665). Oil on canvas. Gabriël Met

Reader R	esponse Letter to the Editor 53	REVISTA	Observation
ika Virus Infection, Pregnanc	y and Microcephaly	INSTITUTO	
nfecção por vírus Zika, gravidez d	e microcefalia	MEDICINA	Perspectives on the Zika outbreak: herd immunity, antibody- dependent enhancement and vaccine
Von Sriwijitalai ¹ Viroj Wiwanitkit ²		TROPICAL	Recife, January 26, 20
	dress for correspondence Won Sriwijitalai, RVT Medical Center, ggkok, Thailand (e-mail: wonsriwi@gmail.com).	DE ÃO PAULO IOURNAL OF THE SÃO PAULO INSTITUTE OF THEOPICAL MEDICIN	Zika virus (ZIKV) is a member of the family <i>Flaviviridae</i> , which comprise manually home viewer that more make rabble health threats such as Denne
	e of anti-inflammatory drugs provides any clinical advan- ge in cases of Zika virus infection.		probably arrived in Brazil in early 2015, and has been associated with neurologic symptons, including microcephaly ¹ . Here, we used the data concerning the DENV cases during the last years in Braz to infer about future ZIKV outbreaks. The possibility of infection by any DEN serotype creates an epidemiological profile where each outbreak corresponds to the circulation of a serotype in a non-prosed population. Unlike the DENV, ZIK has only an energy although the ZIKV lineages (Asian and African) have be
Letter to the Editor	Reply	"Here, we	e it has been shown that sera from mice infected with either Africe seages were grable of neutralizing equivalently homologous as V lineages finus, one only ZIKV serotype may induce a differe
Reply to: Zika Virus Infection Microcephaly	on, Pregnancy and	used the	table ned itself in the population, we expected an increase in the
Resposta para: Infecção por Vír	us Zika, Gravidez e	concernir DENV cas	idemiological silencing of 3-4 years ⁶ .
Microcefalia Geraldo Duarte ¹		to infer a	probably due to vector seasonal features, as reported for deng
¹ Universidade de São Paulo, Ribeirão Preto, Sao Paulo, Brazil Rev Bras Ginecol Obstet 2018;40:54–55.	Address for correspondence Geraldo Duarte, Universidade de São Paulo, Avenida Bandeirantes, 3900, Ribeirão Preto, SP 14049-900, Brazil (e-mail: gduarte@fmrp.usp.br).	future ZII	 In Brazil, environmental education and vector control were not ab
		outbreak	S. "Infections in the past decades, and did not prevent the emergence transmitted by the same mosquito vector (e.g. ZIKV and CHKV accination appears to be the best way to prevent new futu (Figure 1B). Nevertheless, it is important to acknowledge th
Dear Editor, I would like to thank Dr. Sriwijitalai & Wiwanitkit for the letter to the editor about our article on the care of pregnant	Yes, like you, we believe there is a percentage of asymp- tomatic cases of Zika virus infection, and that microcephaly is the epilogue to a vast process of damage to the embryonic	Departamento de Virologia e Tempia Espanimenta (251º 50870-430, Racita, P Beacil Tet: +56 81 2101 2564	cross-reaction between DENV and ZIKV antibodies has been reported and su
women at the time of the zika virus infection. ¹ I would also like to thank you for the opportunity to clarify some of the	and fetal nervous system. As some of these changes occur in the postnatal period, the adequate care offered to mothers	E-mait: josevallerjailvoji @gmail.com Received: 26 January 2017	This should be considered when analyzing the process of vaccination again dengue (already available) ¹¹ and zika (still under research and developme
topics they have mentioned. About the statement 'If there are no complications	affected by this infection should include guidance and the correct referral of "all children exposed to this infection," not	Accepted: 24 March 2017	process) ¹² . A prudent way of thinking about vaccination and strategies for vaccin development for ZIKV and DENV, ensuring their simultaneous control wou
(meningoencephalitis or Guillain-Barré syndrome), further	only those with organic birth defects, as mentioned in paragraph three of the study by Duarte et al. ¹	Rev Tast Med Trop São Panis. 2017;59:x21	Page 1 o

Case re	
 When report a gradient of the second state of the sec	<section-header><section-header><text><text><text><text><text></text></text></text></text></text></section-header></section-header>
Emerging infectious Diseases • www	.cdc.gov/eld • Vol. 24, No. 5, May 2018 933

Research	Emerging Microbes & Infections (2017) 6, e111; doi:10.1038/emi.2017.102 www.nature.com/emi
LETTER TO THE EDITOR	
Zika virus evolution on the ed	lges of the Pacific ocean
Myrielle Dupont-Rouzeyrol ¹ , Iaure Diancourt ² , Elodie Anita Teissier ³ , Morgane Pol ¹ , Maite Aubry ³ , Oumar F Valérie Caro ²	
Emerging Microbes & Infections (2017) 6, e111; doi:10.1038/e	ml.2017.102; published online 13 December 2017
Dest Editor, Over the past decade, arthropod-borne viruses (arboviruses) induding dengue virus (DENV), chilungunya virus (OHIKV) and Zika virus (ZIKAV), have demonstrated their potential to pose major global public health problems. Several outbreaks caused by these viruses recently occurred in the Pacific region, probably resulting from multiple factors ¹ the presence of competent mosquito vectors; environmental and demographical conditions favourable to mosquito proliferation and disease transmission; and the increasing volume of travel between continental tropical amas where arboviruses are endemic and the Pacific, and between Pacific Island Countries and Territories (PICTs). In 2013, ZIKAV emerged in French Polynesia and subsequently spread to other PICTs. ¹ In 2015, ZIKAV appeared in Brazil and several other Latin Amerian countries where it was associated with a marked increase in the number of cases of congenital abnormalities, including microcephalus, and neurological disorden. ^{2,4} Phylogenetic analysis classified ZIKAV into two major genetic lineages, African and Asian, with the Asian lineage responsible for the current global expansion of ZIKAV. ² To date, except for French Polynesis there are little data on ZIKAV Pacific strains. ^{2,6} In our study my paking 13 new Vill ZIKAV genome sequences, isolated from human patients in French Polynesia, New Caledonia, Cook klands and Vanuuta betwen 2018 and 2015 (Supplementury Table SI). Full ZIKAV genomes were obtained by in-house high-droughput sequen- cing with the Ion Personal Genome Machine (PiCM) sequencer (Thermofisher Scientific, Terchologies, Caribad, CA, USA). Briefly, viral RNA was extrated from serum, saliva swab or cell culture supermaturi (obtained by in-house high-droughput sequency (Markow as purified using Agencourt RNAClano YB beside S1). Treated with Turbo Danase Enzyme (Environgentifie Technologie), viral RNA was purified using Agencourt RNAClano YB beside S1). Treated with Turbo Danase Enzyme (Environgentifie	"In our study adding 13 new fu ZIKAV genome sequences we provide for the fi time a map of th whole ZIKAV Pac sublineage"

The objective of this study was to o	conduct a bibliometric analy	ysis of all Letters-to-the-Editor	written about the
--------------------------------------	------------------------------	-----------------------------------	-------------------

Zika Virus between 1952 and 2018, encompassing the largest Zika Virus epidemic to date which occurred in the Americas in 2015-2016. Study parameters included the total number of Letters published, date range, category of Letter, number of authors, number of references, use of graphics, and funding.

Category	1992-2019	2010	2017	2010	IOIAL			
Response	1 (6.7%)	62 (25.4%)	53 (36.6%)	33 (34.7%)	149 (29.9%)			
Reply	1 (6.7%)	23 (9.4%)	17 (11.7%)	15 (15.8%)	56 (11.2%)			
Observation	4 (26.7%)	66 (27.1%)	34 (23.4%)	8 (8.4%)	112 (22.4%)			
Case Report	5 (33.3%)	42 (17.2%)	12 (8.3%)	11 (11.6%)	70 (14.0%)			
Research	4 (26.7%)	51 (20.9%)	29 (20.0%)	28 (29.5%)	112 (22.4%)			
TOTAL	15 (100%)	244 (100%)	145 (100%)	95 (100%)	499 (99.9%*)			
* Total less than 100.0% due to rounding								

1-5 authors:

6-10 authors:

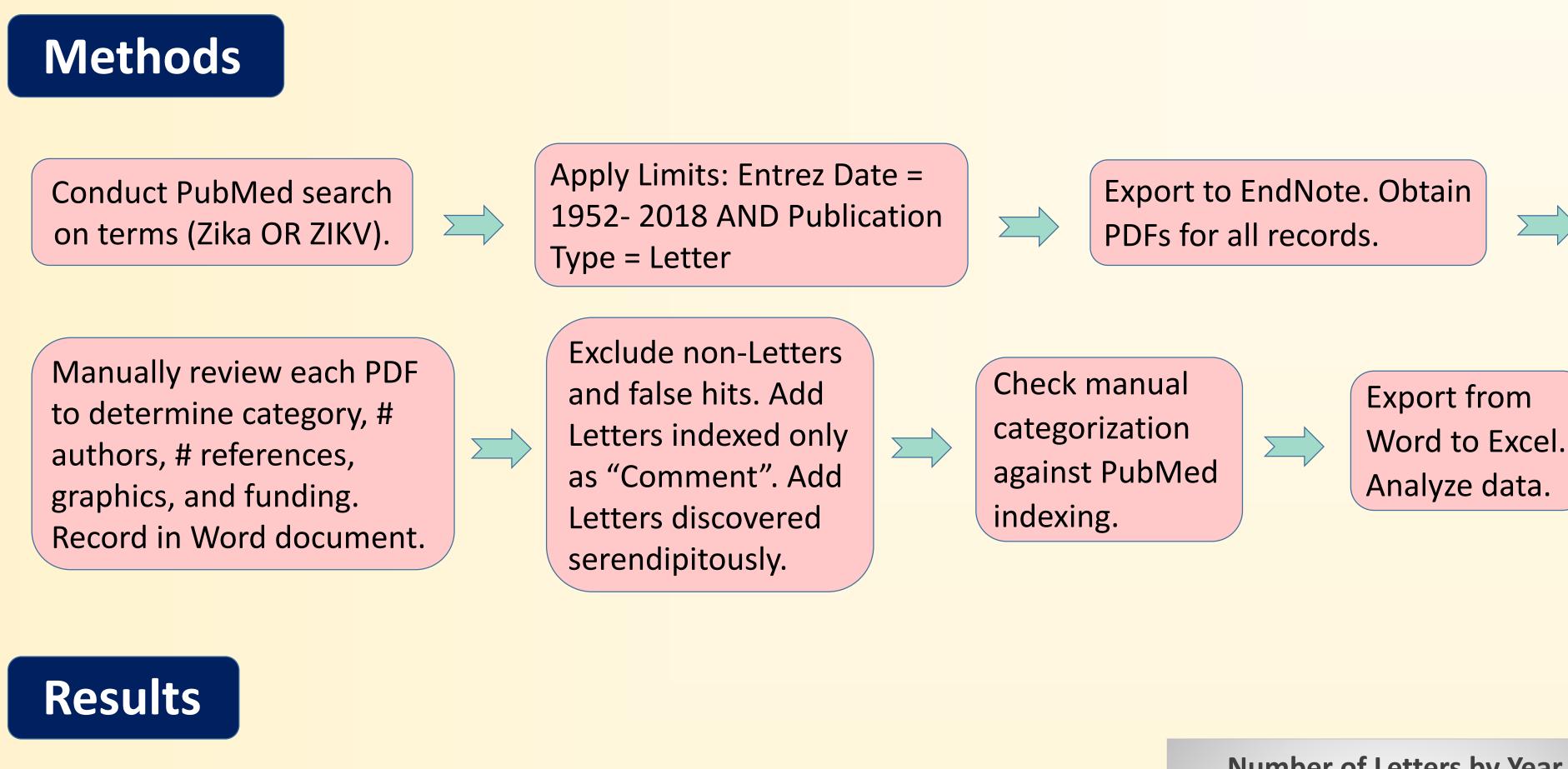
11-15 authors:

16-20 authors:

> 20 authors:

- -									•	D	ocr	٦Or		щ	Pم	nlv	' = 4	1 1	0/
0%)	145 (1009	%)	95 (100%	499	(99.	9%*)					•								
									•								se F	kep	ort
										R	ese	ear	ch	= 5	8 .	9%)		
N	umber of	Aut	hors				N	um	nbe	ro	f A	ut	hc	rs	*				
-		200		140 -															
-5 au	thors:	369	(74.0%)	120 -															
• 1	author:	86	(17.2%)	100															
• 2	authors:	119	(23.8%)	100 -															
-10 a	uthors:	89	(17.8%)	60 -															
1-15	authors:	2	8 (5.6%)	40 -		Ι.													
6-20	authors:	1	0 (2.0%)	20 -		Ш	Ш												
20 au	uthors:		3 (0.6%)	0 -											_	-		-	_
				/ * E>	1 2 cludes 1	3 4 letter with	5 6 1 <mark>35</mark> auth	ors	89	10	11	12 :	13 14	15	16	17	18 19	20	21

Number of References		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 * Excludes 1 letter with 35 authors
0	8 (1.6%)	In this study, the number of references ranged from 0 to 63, with 442 of the 499
1-5	262 (52.5%)	Letters (87.0%) citing from 1 - 10 references. Eight Letters cited > 30 references.
6-10	172 (34.5%)	Many journals impose a limit on the number of references permitted for Letters,
11-15	38 (7.6%)	often 5 or 10. Thus, the most frequently occurring number of references was 5
16-20	7 (1.4%)	with 114 Letters (22.8%), and 51 Letters (10.2%) cited 10 references.



PubMed search for Letters dated 1952-2017 conducted Oct 17, 2018 \longrightarrow 375 Letters

Number of Letters by Year 244

145

>

	21-25	3 (0.6%)
	26-30	1 (0.2%)
	> 30	8 (1.6%)
(

192 Letters (38.5%) included graphics, and 77 Letters (15.4%) reported support from internal or external funding. Additional research is required to establish an association between the number of authors, number of references, use of graphics, or funding support and the quality, value and impact of a Letter.

Limitations

Writing a Letter-to-the-

Editor is often a group

endeavor. In this study,

the number of authors

ranged from 1 to 35,

with 82.8% written by

more than one author.

- A number of limitations occurred as a result of the study's methodology:
- The study was conducted using data from only one database (PubMed).
- The search strategy did not pick up all Letters, particularly in the case of Author Replies.
- Letters were sometimes assigned incorrect MeSH headings. Assignment of MeSH headings often delayed.
- Overlap between the different types of Letters sometimes made categorization difficult.

An additional limitation of the study stems from the nature of Letters-to-the-Editor as a publication type. An advantage to publishing information in a Letter-to-the-Editor is that the publication time is reduced by expediting or bypassing the peer-review process, enabling the information to be disseminated more quickly. However, this shortened publication cycle may result in unexpected anomalies.

For example, relatively few authors published more than one Letter as lead or sole author. Of 341 unique lead authors, only 38 (11.1%) were lead author on more than one Letter. Of these, 24 (7.0%) were lead author on 2 Letters; 6 (1.8%) were lead author on 3 Letters; and 6 (1.8%) were lead author on 5-10 Letters.

Notably, one author was sole author on 36 Letters, and a second author was lead author on 49 Letters, all of which were co-authored by the first author. In all, the first author wrote or co-wrote 104 Letters, for 20.8% of the total. Of these, 78 (75.0%) were Responses, 25 (24.0%) were Observations, and 1 (1.0%) was Research.

PubMed search for 2018 Letters conducted Jan 03, 2019 - 81 Letters Follow-up search for additional 2018 Letters conducted July 15, 2019

→ 11 Letters

 \succ Additions = 26 Letters indexed as Comment but not indexed as Letter, and 13 Letters discovered serendipitously Exclusions = 2 duplicates and 5 non-Letters \succ Total Letters in final set = 499.

Only fifteen Letters were written in the first 64 years following publication in 1952 of the seminal article describing the Zika Virus. As the 2015-2016 epidemic in the Americas unfolded, the number of Letters exploded to 244 in 2016, then dropped by 41% to 145 in 2017, and in 2018 diminished by another 34% to 95.



In this study, well over half the Letters-to-the-Editor published on the Zika Virus from 1952-2018 were categorized as Observations, Case Reports, or Research. The Letters were usually written by more than one author, almost always included references, often contained graphics, and frequently had funding support. These findings suggest that Letters-to-the-Editor may serve as a rich source of information. However, it also demonstrates that unique characteristics of this publication type may make it particularly susceptible to unexpected anomalies.