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RESEARCH CONTEXT

The Dengvaxia controversy is a public health scandal in the Philippines concerning the use of the Dengvaxia® vaccine for Dengue produced by the France based vaccine maker, Sanofi Pasteur. After reports circulated alleging that several children had died because of the vaccine, the Philippines Department of Health (DOH) suspended the school-based vaccination program in late November 2017. Later, the company stated that its vaccine posed a greater risk to people who had not yet contracted Dengue (Grady & Thomas, 2017).

The scandal still exists today with the Public Attorney’s Office (PAO) continuing to do autopsies of children who allegedly died from taking the vaccine, pending the various complaints against vaccine stakeholders like Sanofi Pasteur and Janette Garin (Former DOH Secretary), DOH Sec. Francisco Duque, III, and Senators Angara and Drilon, among others. While there are still many unanswered questions surrounding the Dengvaxia mess, studies have shown that the scandal has resulted in growing’ vaccine hesitancy¹ at the community level, especially among Filipino parents (Larson et al., 2019; Valido et al., 2018).

Improving child health and nutrition is among the key development priorities of New Zealand Aid in the Pacific region. Parental vaccine hesitancy (PVH) threatens long-term health investments. With lowered vaccine uptake resulting from PVH comes the increased likelihood that vaccine-preventable diseases like measles and polio will worsen or re-emerge in the community.

DESCRIPTION OF THE STUDY

Paralleling recent developments in the existing literature that increasingly turned to “social” explanations of vaccine hesitancy, my study underscored the concept of ‘trust’ as a critical lever of vaccine decision-making. However, in contrast to this body of work that so far emphasised the “functional” role of trust in vaccine decision-making, I chose to focus on the cultural dimensions of the concept because I wanted to bridge the media and cultural studies approach to health communication with the topic of vaccine hesitancy.

My study aims to answer the question: *How does the news discourse on the Dengvaxia scandal legitimise journalistic and parental trust cultures in Philippine society?* Due to the highly theoretical nature of my study, however, I limit myself to briefly discussing answers to the following empirical research questions:

1. How are participants in online news reports represented, and whose interests do these serve?
2. To what extent did journalists’ selection of news stories and sources reproduce/resist these representations as legitimations of power?
3. How do parents’ perceptions of Dengvaxia-related information relate to legitimations of power in online news and journalists’ accounts of their gatekeeping practice?

¹ Vaccine hesitancy “refers to delay in acceptance or refusal of vaccination despite availability of vaccination services” (MacDonald, 2015, p. 4161).

Three data collection methods were employed to answer these questions: (1) content analysis, (2) semi-structured interviews, and (3) focus group discussions. Due to the COVID-19 pandemic, interviews and focus groups were conducted online using Zoom from March to May 2021. Firstly, content analysis was used to identify the different legitimation strategies employed to represent participants and actions in news reports of the scandal. Forty (40) online news reports were purposively sampled from three local newspaper websites: INQUIRER.net, Manila Times, Philstar.com, and SunStar Philippines.

Secondly, semi-structured interviews were used to explore how the production of news on the scandal constitutes and shapes the trust culture of journalists. I interviewed ten (10), online journalists, focusing on their selection of news stories and sources, role conceptions, and trustworthiness evaluation of sources. The basis for selection was “current” employment as an online journalist and experience writing, producing, or editing a news report on Dengvaxia.

Third and lastly, focus group discussions were carried out to explore how the audience’s reception of news on the scandal constitutes and shapes the trust culture of vaccine-hesitant parents.² Twenty-one vaccine-hesitant parents were selected to participate in the focus groups. They were assigned to the five (5) focus group discussions conducted on separate days. The main criteria for participant selection were past consumption of Dengvaxia-related news and a middle-class income of at least PHP 19,040 but not more than PHP 190,400 (Albert et al., 2018).

FINDINGS

Although the findings presented here are tentative, they provide valuable insights for development practitioners and policymakers wanting to address vaccine hesitancy from a critical interdisciplinary lens. The cross-cutting findings of my content analysis of news reports and thematic analysis of interviews and focus groups are discussed in the following sections.

1. Content Analysis of News Reports

The analysed news reports in the study have mainly activated the words “vaccine” and “Acosta” in the scandal news discourse, emphasising primarily that (1) vaccines do something to people’s diseases—in this case, Dengue—and that (2) PAO Chief Atty. Percida Rueda-Acosta was the primary speaker who defined for the public how to make sense of what happened following the government’s suspension of the controversial Dengue vaccine program. Tables 1 and 2 show that vaccine and Acosta have mainly been assigned the role of attribute and sayer, respectively.

Table 1 Role Allocations to Non-Human Participants³

	A : Behavior	B : Existent	C : Actor	D : Senser	E : Attribute	F : Value	G : Sayer
1 : Cases	0	0	7	0	11	1	0
2 : City	1	0	5	0	4	0	3
3 : Country	1	0	5	0	6	1	0
4 : COVID	0	1	2	1	4	3	1
5 : Deaths	0	1	1	0	3	1	0
6 : Dengue	0	2	8	1	13	5	0
7 : Dengvaxia	1	3	15	1	10	6	2
8 : Department	0	1	11	3	0	1	5
9 : DOH	0	1	15	8	0	1	12

² Vaccine-hesitant parents are those parents who delayed/refused some/all vaccines in the routine childhood immunization schedule provided by the Philippines Department of Health.

³ The following role categories are based on the Systemic Functional Linguistics (SFL) transitivity system’s classification of “active” participants who act in linguistic narrative clauses (see Kress & Van Leeuwen, 2006; Van Leeuwen, 2008). For instance, sayer is the participant who speaks in a verbal process clause whereas an attribute is the participant that defines the quality or identity of a carrier in a relational process clause. Both non-human and human participants can be activated in linguistic clauses.

10 : Government	2	1	6	8	3	2	2
11 : Immunisation	0	0	6	0	4	1	0
12 : Measles	0	0	2	0	4	1	0
13 : Office	1	0	6	2	0	2	4
14 : PAO	1	0	15	5	2	0	11
15 : Percent	0	0	0	2	9	0	7
16 : Program	0	1	4	1	2	1	0
17 : Public	2	0	7	3	3	2	5
18 : Sanofi	0	1	9	0	3	1	9
19 : Vaccine	2	6	18	5	39	9	5

Table 2 Role Allocations to Human Participants

	A : Behavior	B : Existent	C : Actor	D : Senser	E : Attribute	F : Value	G : Sayer
1 : Acosta	2	0	2	4	0	0	20
2 : Chief	2	0	2	1	0	0	8
3 : Children	1	1	6	1	7	4	0
4 : Duque	1	1	2	1	1	0	9
5 : Garin	3	2	0	3	0	1	10
6 : Parents	2	0	6	1	0	3	3
7 : People	2	1	1	4	4	0	0
8 : Secretary	3	1	2	0	0	1	7

These semiotic choices indicate the multiple ways in which vaccine was represented as an issue or topic being talked or reasoned about and a medical “technology” that is procured, administered, and implemented on the one hand and the prominence given to Atty. Acosta as a news source about the vaccine scandal. Sec. Janette Garin (“Garin”) was the second most activated human participant in the news sample, also a woman and often depicted as the archenemy of Acosta. In this scandal, Garin was only activated half as many times as Acosta was. Given the limited and purposive sample of news reports analysed and the possible variability of representations across media platforms and the scandal’s lifespan, I can only speculate that this was due to the media’s intensive coverage of PAO-sponsored autopsies—about which Acosta spoke a lot.

Altogether, the frequent activation of vaccine and Acosta in the news sample, in my view, served the interests of the current administration because it demanded less for calls on public transparency and accountability than moral outrage against a supposedly corrupt and dishonest past administration. It could be due to this that Sec. Duque and others in the government showed little interest in assuaging an increasingly vaccine-hesitant public, particularly parents, that Dengvaxia and all government-approved vaccines are still safe to take. After all, every new administration in the Philippines often portrays an “ideal” present and an even better future by contrasting themselves with a “bad” past administration.

2. Interviews with Journalists

My thematic analysis of interviews revealed the existence of a highly-aware, critical, and politically-savvy online journalists who reported on Dengvaxia. Like news reports, journalists were also purposively sampled, so claims-making about the extent of alignment between news gatekeeping and what was ultimately represented in the news will be speculative and context-limited at best. Be that as it may, several of them alerted me that some experts have warned the Philippine government early on about the risks of developing severe Dengue from taking the Dengvaxia vaccine. This fact has been overlooked in the larger public discourse since many newsrooms were, as in the words of one journalist, “were already big on the autopsy findings of PAO.” Hence, a clear timeline of events leading to the Dengvaxia suspension was wanted, mainly because Senate hearings about the suspended vaccination program had begun.

The accounts of the interviewed journalists provide a very different picture from what I found in my content analysis of news reports. They pointed out the importance of relying on experts as credible news sources—and not just any experts but specialist doctors like forensic pathologists—in validating

PAO's claims that link the deaths of children to Dengvaxia. Moreover, journalists have also expressed the need to deviate from covering autopsies and avoid false balance in the overall reporting of Dengvaxia. The scandal is more than just the Dengue vaccine itself but the "process" of its implementation—some journalists said—which was allegedly hastened due to the upcoming elections, completely ignoring the early warnings given by some experts. All of these contradict the findings of my content analysis, showing the failure of news reports to push for transparency and accountability by giving less emphasis to vaccines and Atty. Acosta and providing a clear historical timeline of events leading to the scandal instead.

3. Focus Groups with Vaccine-Hesitant Parents

My thematic analysis of focus groups with vaccine-hesitant parents found that parents' perceptions of the Dengvaxia information that they have received have caused them to be uneasy and uncertain about vaccine risks and benefits. They pointed out that it is hard to know the truth about Dengvaxia and vaccines because of media bias and politics. Upon closer inspection of their statements, I found that many parents in my study do already hold powerful beliefs about parenting and child healthcare even before the scandal happened. One parent even reported feeling "vindicated" that a vaccine issue was finally brought out in public since they have been vaccine doubters for a long time. Others have pointed out 'institutional embedment' as a vital heuristic in determining a media source's trustworthiness or particular experts who speak about vaccines. Some have even recalled their child being injured by vaccines in the past.

The tentativeness of my focus group findings at this point can only bring me as far as saying that PVH is not reducible to a 'knowledge deficit' problem. People do not refuse/delay vaccines simply because they do not know enough about them. They may also hold different parenting beliefs telling them to take their time in vaccine decision-making (more on this in my complete thesis). Based on my discussions with parents, the Dengvaxia scandal was crucial in triggering their distrust of vaccines, vaccine systems, and vaccine policymakers but not necessarily in transforming them from vaccine compliers to doubters overnight. Nonetheless, I was proven wrong in presuming that all issues surrounding PVH are reducible to trust. Several parents in my study do, in fact, still lack some basic knowledge of what vaccines are, how they work, and why they are essential. If at all, parents' distrust of some or all actors in Dengvaxia may have prompted them to look for knowledge sources on children's healthcare other than biomedicine.

IMPLICATIONS

Journalists' preference to use elite sources in their news reporting is not the main problem in reporting vaccine scandals. It only becomes one when, in the face of declining vaccine confidence amid a vaccine scandal, it still chooses to give more voice to elites who are incapable or unwilling to reassure the public that approved vaccines work and are still safe to take. One of the most remarkable contributions that news media can make, both as health communicators and facilitators of public discourse during a scandal, is to provide a historical timeline of events that led to it. That way, citizens can better understand why the issue of public accountability and transparency ought to be treated as *relevant to* but *distinct from* questions of vaccine safety.

Governments must make efforts to strengthen AEFI monitoring and communication systems at the local level so that doctors and healthcare workers—whom parents most trust—can promptly and effectively reassure the latter about the safety of childhood vaccines approved by the government. Media campaigns remain necessary tools for addressing vaccine hesitancy. However, no one can replace the facework conducted by doctors and community healthcare workers on behalf of vaccines, vaccine systems, and vaccine policymakers. These are abstract entities whose trustworthiness depends primarily on those who represent them to the public.

Finally, it is vital for development practitioners and policymakers working in public health to recognise that a critical interdisciplinary lens is needed in planning and implementing health communication campaigns. Promoting healthy behaviours like vaccine compliance in the form of media campaigns, for instance, are susceptible to being distrusted during vaccine scares and scandals when not enough investment has been made to study the prevailing trust culture of target groups early on. Changing

people's unhealthy behaviours (e.g. vaccine delay/refusal/resistance) via communication is not simply a matter of presenting them with new information. At its very core, health communication, as implied by the study findings, means approaching people by listening to where they are coming from with empathy and respect for difference.

LIMITATIONS AND FURTHER RESEARCH

The limitations of my study mostly revolve around its single-case study design, use of a non-probability sampling strategy, and focus on trust culture. In the first place, a single case—the Dengvaxia scandal—has allowed the study to uncover the hidden mechanisms linking the news discourse of vaccine scandals to the trust culture of online journalists (as news producers) and vaccine-hesitant parents (as news audiences) in the Philippines. Yet, that also prevented it from determining whether the same set of mechanisms applies to vaccine scandals in non-Western societies like China, Indonesia, and Fiji because they may be operating under different contextual conditions. Moreover, collecting/selecting non-probability samples of news reports, journalists, and parents for the study also meant that it had to contextualise the significance of the data trends found in the analysis based on current empirical literature on news representation, production, and reception.

Above all, the centrality of the 'trust culture' concept in the study implied that it had to deal with many "moving parts" during the early phases of data analysis. Trust culture is an essential element of Sztompka's (1999) macro-level social theorising on trust that drew from his earlier work on the theory of 'social becoming'. But no one ever since had attempted to unpack its constituent elements, let alone operationalise it in an empirical study. The contribution of my research toward building a more comprehensive trust culture framework is limited to providing initial guiding assumptions about what to look for in future media and communication research applying trust culture to the problem of vaccine hesitancy.

In response to these limitations, several questions are ripe for further research. How do trust cultures contribute to the structuring of news production and reception of public health scandals and, by extension, their influence on parental vaccine decision-making in non-Western societies? What should health campaigns in the media be like to enhance or build trust in vaccines, vaccine systems, and vaccine decision-makers? Is it possible for governments to "scandal-proof" their vaccine campaign plans to prepare for eventualities like corruption allegations in vaccine procurement, adverse reaction to vaccines, or mistakes in administering vaccines?

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