COVID-19 and Infodemic in Southeast Asia

James Gomez and Robin Ramcharan[2]

Abstract

This paper takes stock of how, during its research period (February 2020 to August 2021), COVID-19 related 'infodemic' has adversely disrupted access to accurate public health information in Southeast Asia by outlining the patterns and evolution of COVID-19-related infodemic in the region. It then assesses existing non-legal measures that have been used in response to the infodemic. Strategies reviewed in this paper include: information sharing, fact checking, responses of technology companies, quality journalism and media information literacy (MIL) – each with shortcomings of their own. The paper concludes that the situation in the region calls for a concerted effort to develop MIL education as a long-term guarantee against infodemic; while other strategies noted in the paper must also be developed to accompany MIL. The paper recommends that MIL and other strategies need to be constantly monitored and assessed for their effectiveness. New strategies have to be adopted as the nature of infodemic evolves.

Keywords: COVID-19, Infodemic, Fake News, Southeast Asia, Media Information Literacy

---

[2] Regional Director & Executive Director, Asia Centre

Introduction

Fake news and misinformation have been a pressing issue among countries in Southeast Asia even before the pandemic. With a rise in internet penetration and decentralization of content and news consumption, authors of these fake news have found it easier and more profitable to accelerate the use of false and misleading contents. But since January 2020, the COVID-19 outbreak gave rise to the phenomenon of 'infodemic', where the mixture of large unverified and false information about the disease outbreak pushed information disorder to a new level.

Literature

Infodemic

This paper focuses on 'infodemic', rather than the widely used 'fake news/mis-/disinformation' to address the emerging phenomenon of having 'too much information including false or misleading information in digital and physical environments during a disease outbreak' as defined by WHO (2020). This allows readers to distinguish between separate cases of fake news and the mass flow of similar variations of fake news that are prevalent in a specific period of time. This 'overload' of false information in pandemic times came about as ordinary individuals were quick to fill in gaps in information with misinformation, especially given the growing internet and social media use, in a time when no central authority

had given enough information to satisfy the general public (Pan American Health Organisation, 2020).

Pian, Chi, and Ma (2021) provides a useful and comprehensive list of studies that seeks to describe what had caused the phenomenon. One of the major causes of the COVID-19 infodemic is social media usage as these platforms lacked quality control of information produced and shared. It also provides an enabling platform to engage and (mis) inform the wider public. Social media is also noted as creating a psychological effect that enables the production and sharing of rumour-based content. Underlying causes to the phenomenon are the lack of health and information literacy among the public and a deep distrust of official sources, especially in political environment that lack transparency. For the part of the producers, it could be argued financial, political and ideological incentives of the content produced are culprits of the infodemic.

What is still lacking is, however, an effort to review the nature and evolution of infodemic in the turbulent preliminary stages of COVID-19 en/ pandemic in Southeast Asia to identify types of COVID-19 infodemic that were prevalent. Such an effort works in tandem with studies finding causal relationships to the infodemic to inform policy-makers and other stakeholders as to what information were in demand and for what reason.

Media Information Literacy (MIL)

MIL refers to the ability of an individual to identify different types of media and understand the message they are consuming or sending. Being media information literate requires four components: ability to access, analyse, evaluate and create messages. In pandemic, MIL is key to prevent infections and death for the reason that '*many … were unaware of how much information about the pandemic was incorrect, deliberately misleading or malicious*' (Rattray, 2020). Of all the measures used to deal with disinformation, media and information literacy education works the best, especially in a long-term basis, since it relies directly on users' awareness (MacGregor, 2020) and serves as a bottom-up strategy to counter false and misleading content. However, a more holistic approach to MIL should include efforts to review other measures used to combat infodemic and appraise these measures (inclusive of MIL) not only in terms of each of their effectiveness, but also as part of the wider effort to combat infodemic.

Structure

This paper reviews the situation of infodemic in the region during its research period (February 2020 to August 2021) and the use of other tools, measures and policies accompanying MIL in the region to combat COVID-19 infodemic. It does so to provide policy

recommendations to various stakeholders and an implementation plan to TMF.

This paper is structured into five parts. Firstly, it reviews patterns and evolution of infodemic in Southeast Asia to understand its effect on the access to accurate public health information. Then, it reviews strategies that have been adopted by national governments, technological organisations, CSOs, and the journalistic community, to combat infodemic to point to the fact that the region is in need of sustainable MIL education development, while also developing other accompanying strategies. After a brief conclusion in the third section, the paper moves to offer a set of recommendations that can be adopted by various stakeholders; along with an implementation plan for the Thai Media Fund (TMF) in the fourth and fifth section respectively.

Analysis

COVID-19 Infodemic in Southeast Asia

COVID-19-related 'infodemic' promptly picked up pace when infections cases started to show up in places outside of China. Table 1 shows how fact-checking initiatives in Malaysia, Philippines, Singapore and Thailand responded to rise of false information. In Malaysia, the spike in March 2020 corresponds to the emergence of several local clusters. This uptick in infodemic similarly repeated in Philippines and Thailand. In Singapore, while the number of

clarifications seems small, this has to be juxtaposed with the fact that it had only posted 10 times in 2019.

Table 1: Monthly Posts across National Fact-checking Initiatives

	Malaysia	Philippines	Singapore	Thailand
Jan 2020	40	4	20	76
Feb 2020	29	13		111
Mar 2020	169	24		193
Apr 2020	168	40		153

(Compilation from various sources)

Further, by researching the nature of COVID-19 infodemic in the country, this paper finds that it consistently changes the hooking content as the pandemic and public health responses progress through time. In Q1 2020, the predominant type of infodemic was those concerned with the origin of the virus, whether from China (Walton, 2020) or the US (Anti-Fake News Center, 2020). It then moved on to infodemic about unverified clusters of the epidemic in certain localities. For example, that cases were found in Ho Chi Minh City (Son, 2020) or in a school in Johor, Malaysia (Bernama, 2020).

Likewise, scientifically unproven claims to prevent or treat the virus were equally tenacious. For example, in Myanmar, one of the most common bogus remedies was to citing a religious mantra (Myint, 2020). Occasionally, public officials were not exempted from reproducing this type of infodemic. In July 2021, Prime Minister Hun Sen of Cambodia commented that he uses Chinese traditional medicine as a preventive measure against COVID-19 (Chhengpor, 2021).

At the time of research, misinformation over the efficacy and long-term effect of different types of vaccines, including its provision, is the most prevalent type of infodemic (Sen, 2021; Gomez, 2021).

Upon compiling data, looking at types of mis-/disinformation that had received national prominence, false information related to COVID-19 vaccine was by far the most prominent (7 countries), while misinformation about COVID-19 infections or deaths, tied with fake, unproven treatment to COVID-19, were came in second (6 countries). Last but not least, conspiracy theories over the origin of the virus came in last (4 countries), per table 2 below.

Table 2: Type of Infodemic in Each ASEAN Countries

Country	Origin of COVID-19	Infections & Deaths	Bogus Remedies	Vaccine Efficacy
Brunei		☑		☑
Cambodia		☑	☑	
Indonesia	☑	☑	☑	☑
Laos				☑
Malaysia	☑		☑	
Myanmar			☑	
Philippines	☑	☑	☑	☑
Singapore				☑
Thailand	☑	☑	☑	☑
Vietnam		☑		☑

Strategies to Respond to Infodemic

The region has seen four main non-legal strategies that has been adopted to counter the infodemic. As will be shown, these

measures are means by which various stakeholders have adopted (whether successfully or not) to counter the causes of infodemic as discussed above.

Information Sharing-Southeast Asian governments' response to the pandemic were often characterised by unwillingness to share information such as when Indonesian officials conceded that it was withholding information of daily COVID-19 cases by half (Lamb and Allard, 2020), or worse, retaliations when called out. In Thailand, the Government Pharmaceutical Organisation (GPO) filed a defamation lawsuit against the Chairman of Thonburi Healthcare Group (THG) after the latter's critical comments regarding the lack of transparency in the procurement of Moderna vaccine (Bangkok Post, 2021). In the Philippines, critics and activists-who demanded for greater transparency-faced allegations of being part of a communist insurgency or a terrorist group (Deinla, 2021). Such practises only led to further speculations and unverified rumours among the public, making them susceptible to false information and subject to criminalisation. Obstructing access to information especially information of vital concerns such as sites of infections and vaccine efficacy, could only increase public anxiety and push people towards alternative sources of information that are false.

Fact Checking-Some governments have set up their own fact-checking agencies. For example, the Anti-Fake News Centre was established in 2019 in Thailand. Similarly, in January 2021, Vietnam

launched its own Centre. Critics, however, were quick to point out that the fact-checking initiative seems to be more concerned with providing the government's version of the truth and lacks objectivity (Phaicharoen & Watcharasakwet, 2019). Assessment by legal experts point that 'correction practises across the sites mainly function to sustain the salience of a supposedly constant and omnipresent fake news threat … official fact checks accompany domestic fake news discourses that prepare the ground for restrictive legislation' (Schuldt, 2021). For example, in 2020, in Philippines, journalists were charged with spreading false information (CPJ, 2020).

Even before the pandemic, civil society groups have formed fact-checking initiatives, to provide an independent alternative to governmental fact-checking. These offer a portal for citizens to verify information they read online and to signal dubious information. In January 2020, Poynter Institute's *International Fact-Checking Network* (IFCN) launched *#CoronaVirusFacts Alliance*, which mustered the effort of more than 100 fact-checking organisations to publish, share and translate facts surrounding the coronavirus (Poynter, 2020).

Although fact-checking organisations can provide reliable sources to timely identify COVID-19 misinformation, they simply cannot address every piece of information and fake news content circulated in private groups on social media platforms and messaging applications are likely to be underrepresented by

international fact-checkers. On top of this, fact-checkers have to make choices of how to use limited time and resources; this may lead to selection biases (Porter, 2020; Scott, 2020).

Technology Companies-Unlike traditional media outlets, social media platforms generally do not have similar oversight mechanisms, nor any accountability for the messages spread via their platforms. Given that technology companies own the platforms through which much of the disinformation is being shared, their role is equally important. In April 2020, Google pledged $6.5 million in funding to fact-checking initiatives (Mantzarlis, 2020). Other platforms either adopted a take-down approach or a 'strike system' (Rosen, 2020; BBC, 2021; Canales, 2021). However, it is important to note that concrete actions such as take-down order and suspension of users' accounts were introduced belatedly. Another issue of note is that due to the diversity of languages used in social media and the limited amount of user base in each language, tech companies disproportionately have less focus on fact-checking and 'striking down' non-English content (Valencia, 2021).

Quality Journalism-Quality journalism was already touted to be another solution to fake news and disinformation even before the COVID-19 public health crisis. However, it is still unclear whether the promotion of quality journalism alone is indeed an effective answer. Emerging evidence suggests that quality journalism, while desirable, is expensive, not profitable, much slower and less

sensational than fake news. The return from sensationalist, false content vastly outpaces any return on quality journalism. Underlying the problem is not infodemic *per se*, but a crisis of trust. In Southeast Asia, there is a trust deficit in traditional journalism or mainstream media in many countries due to government interference; with the exception of Timor-Leste and Singapore, all countries in Southeast Asia saw a regression in their World Press Freedom scores from 2020 to 2021 (Reporters Without Borders, 2021).

Media Information Literacy (MIL)-MIL is a preventative, rather than reactive, measure to infodemic. Its superiority lies in its capacity to engender critical engagement with news by a media-savvy citizenry.

As a result, a ground up, citizen-based and widespread epistemic (media-literate) community requires sustained MIL education, inclusive of digital literacy. Sound MIL requires imparting a minimum understanding of the technologies deployed by tech firms, in particular new technologies such as artificial intelligence, to attract citizens to preferred content and to false and misleading content that is harmful.

However, a UNICEF (2021) revealed that, among Southeast Asian countries, there are large differences between LDCs and non-LDCs in terms of the literacy level. Regionally, only 31% of youth respondents think they are excellent (5) or quite good (4) in their

digital skills. The disparity is more pronounced in least developed countries (LDCs) as young people are more unsure of their ability to navigate the digital world than their counterparts in non-LDCs. At the same time, educators in non-LDCs such as Malaysia and Thailand reported the difficulty to discuss how to critically evaluate information and media content, due to the limited press freedoms and repressive laws that discourage critical thinking and freedom of expression (UNESCO, 2020).

Conclusion

Driven by public anxiety, lack of access to accurate public health information and mistrust in official sources of information, there has been a rise in different types of COVID-19 related disinformation in the region from 2020 to mid-2021. These types of disinformation corresponded to the different stages of the pandemic and had different themes: from the origin of the virus, reports of infections and deaths, bogus remedies to vaccine efficacy.

In combating infodemic, many measures have been used with varying limitations. While being an authoritative source that could dispel some of the most unfounded fake news, Southeast Asian governments had generally been unwilling to share information. Fact-checking initiatives, though being of use, either are government-run or simply could not match the virality of information. Efforts by social media platforms only came belatedly

and are stymied by the diverse languages used in their platform. Call for quality journalism to verify facts and debunk misinformation are limited by the fact that it is expensive, time-consuming and less sensational than fake news.

While these tools may be necessary, they have not proven to be sufficient to combat the infodemic. Deep societal de-stabilisation caused by a post-truth environment has generated not only false information emanating from multiple sources including state, traditional, online media, bloggers and citizen journalists, but also increased its volume. At present, media literacy is an important tool against disinformation that is being mainstreamed in formal and public education.

Nevertheless, MIL and MIL-education of Southeast Asia in their current shape leave much to be desired and are not effective enough to tackle the pandemic-driven infodemic, whether due to the lack of quality education or as a result of the political environment of the region. As such, solutions to both disinformation and infodemic need to be constantly reviewed and updated.

Policy Implications

Listed below are policy recommendations targeted at various stakeholders, on MIL, transparency, quality journalism and cross-stakeholder collaboration.

Media and Information Literacy

- Promote pluralism of MIL-related content (following UNESCO's Five Laws of Media and Information Literacy) and ensure that MIL education programs include critical thinking and participation from stakeholders at its core.

- Shape MIL programs to support quality journalism such as the inclusion of training schemes for journalists as they are another important actor in promoting MIL.

- Increase support for evidence-based research on issues related to MIL to be used as knowledge toolkits, which can be integrated into the MIL programs.

- Develop a national index to measure the level of MIL in Thailand, breaking down into age groups, genders and geolocations.

Information Sharing

- Avoid making reference to government-funded fact-checking initiatives as authoritative sources of information.

- Use Thai Media Fund's own fact-checking programs, which are led by civil society organisations, when correcting the COVID-19 infodemic.

- Be creative when communicating key information to the public, such as using short-infographic video (1 to 1½ minute), or trendy engaging visuals.

Recognition and Support of Quality Journalism

- Recognise and promote the work of critical, investigative journalism through an annual award ceremony, with a robust and transparent judging process.

- Work with journalist associations, national press councils and media organisations to develop codes of ethics and self-regulation systems.

Collaboration with Stakeholders

- Initiate an annual, flag-ship international conference or forum as a venue for academics and media practitioners to present their latest research findings, exchange best practises and foster MIL regional and international networks.

- Deepen existing collaborations with technology companies, namely social media platforms, to be more and proactive on removing Thai content infodemic identified by TMF's fact-checking initiative and support the effort to promote quality journalism on their platforms.

Implementation

Given this paper's arguments and its policy recommendations, the author sees the Thai Media Fund (TMF) as a consequential promotor and facilitator of the efforts against

infodemic. As such, this section provides the Fund with what it should make its objectives.

TMF should promote MIL-related content and develop MIL-related programmes, have the programmes be inclusive of quality journalism; support and fund evidence-based research on MIL issues; and monitor the situation of MIL in Thailand.

At the same time, in addition to fostering MIL, TMF should also take into account and concretise the aforementioned measures that supplement it. These include: sharing and communicating fact-based information from non-governmental sources; collaborating with academia and media practitioners in fostering quality journalism; and collaborating with tech companies in calibrating the removal of infodemic on online platforms. Such initiatives must be integrated into its MIL-related initiatives and programmes.

Reference

Abdoli, A. (2020). *Gossip, rumors, and the COVID-19 Crisis*. Retrieved 5 July 2021, from https://www.cambridge.org/core/services/aop-cambridge-core/content/view/3D3C8B0C058C12709114B88393888C12/S1935789320002724a.pdf

Anti-Fake News Center. (2020). *Fake news, don't share! coronavirus is an infection that was invented by the CIA and then was put in animals and spread into China*. Retrieved 10 June

2021, from https://www.antifakenewscenter.com/ข่าวปลอม-
อย่าแชร์-เชื้อ

Bangkok Post. (2021). *GPO sues THG chairman over Moderna
vaccine comments*. Retrieved 14 July 2021, from
https://www.bangkokpost.com/thailand/general/2148683/g
po-sues-thg-chairman-over-moderna-vaccine-comments

BBC. (2021). *Anti-Covid vaccine tweets face five-strikes ban policy*.
Retrieved 15 December 2021, from
https://www.bbc.com/news/technology-56252545

Bernama. (2020). *Covid-19: Johor health dept denies ordering JB
school to close*. Retrieved 8 June 2021, from
https://www.malaysiakini.com/news/510641

Canales, K. (2021). *YouTube says videos that violate its policies
will now receive a 'strike.' Channels that receive 3 strikes
in a 90-day period will be permanently removed*.
Retrieved 28 May 2021, from
https://www.businessinsider.com/youtube-three-strikes-
permanently-delete-channels-policy-violations-trump-
capitol-2021-1

Chhengpor, A. (2021). *Hun Sen contradicts senior health official
over use of traditional medicines*. Retrieved 2 July 2021,
from https://www.voacambodia.com/a/hun-sen-
contradicts-senior-health-official-over-use-of-traditional-
medicines-/5951003.html

CPJ. (2020). *Two reporters charged for spreading 'false information' about COVID-19 in the Philippines*. Retrieved 15 April 2021, from https://cpj.org/2020/04/two-reporters-charged-for-spreading-false-informat

Deinla, I. (2021). *"Red-tagging" and the rule of law in the time of COVID-19*. Retrieved 15 April 2021, from https://www.internationalaffairs.org.au/australianoutlook/red-tagging-and-the-rule-of-law-in-the-time-of-covid-19

Gomez, J. (2021). *Thousands jam Philippine vaccination sites over false news*. Retrieved 15 August 2021, from https://apnews.com/article/health-coronavirus-pandemic-philippines-4935ed3b84db33a7f68768d07099cf2a

Lamb, K., & Allard, T. (2020). *Endless first wave: How Indonesia failed to control coronavirus*. Retrieved 30 May 2021, from https://www.reuters.com/article/us-health-coronavirus-indonesia-insight-idUSKCN25G02J

MacGregor, M. (2020). *Empowering young people-and adults-to tell fake news from facts*. Retrieved 9 June 2021, from https://www.dw.com/en/empowering-young-people-and-adults-to-tell-fake-news-from-facts/a-55128051

Mantzarlis, A. (2020). *COVID-19: $6.5 million to help fight coronavirus misinformation*. Retrieved 10 June 2021, from https://www.blog.google/outreach-initiatives/google-news-

initiative/covid-19-65-million-help-fight-coronavirus-
misinformation

Myint, M. (2020). *Myanmar grappling with infodemic*. Retrieved 10
June 2021, from
https://www.bangkokpost.com/opinion/opinion/2041187/m
yanmar-grappling-with-infodemic

Pan American Health Organization. (2020). *Understanding the
Infodemic and misinformation in the fight against COVID-
19*. Retrieved 14 August 2021, from
https://iris.paho.org/bitstream/handle/10665.2/52052/Facts
heet-infodemic_eng.pdf

Phaicharoen, N., & Watcharasakwet, W. (2019). *Thailand opens
anti-fake news center amid criticism from rights groups*.
Retrieved 9 June 2021, from
https://www.benarnews.org/english/news/thai/thailand-
politics-11012019182817.html

Pian, W., Chi, J., & Ma, F. (2021). The causes, impacts and
countermeasures of COVID-19 "Infodemic": A systematic
review using narrative synthesis. *Information Processing &
Management, 58*(6). Retrieved from
https://doi.org/10.1016/j.ipm.2021.102713

Porter, J. (2020). *Snopes forced to scale back fact-checking in face
of overwhelming COVID-19 misinformation*. Retrieved 28
May 2021, from

https://www.theverge.com/2020/3/24/21192206/snopes-coronavirus-covid-19-misinformation-fact-checking-staff

Poynter. (2020). *Fighting the Infodemic: The #CoronaVirusFacts alliance*. Retrieved 28 July 2021, from https://www.poynter.org/coronavirusfactsalliance

Rattray, C. (2020). *Media and information literacy in an age of uncertainty*. Retrieved 14 July 2021, from https://www.un.org/en/un-chronicle/media-and-information-literacy-age-uncertainty

Reporters Without Borders. (2021). *World press freedom index: Journalism, the vaccine against disinformation, blocked in more than 130 countries*. Retrieved 9 June 2021, from https://rsf.org/en/2021-world-press-freedom-index-journalism-vaccine-against-disinformation-blocked-more-130-countries

Rosen, G. (2020). *An update on our work to keep people informed and limit misinformation about COVID-19*. Retrieved 9 June 2021, from https://about.fb.com/news/2020/04/covid-19-misinfo-update/#removing-more-false-claims

Schuldt, L. (2021). Official truths in a war on fake news: Governmental fact-checking in Malaysia, Singapore, and Thailand. *Journal of Current Southeast Asian Affair, 40*(2), 340-371.

Scott, M. (2020). *It's overwhelming': On the frontline to combat coronavirus 'fake news'*. Retrieved 28 May 2021, from https://www.politico.eu/article/coronavirus-fake-news-fact-checkers-google-facebook-germany-spain-bosnia-brazil-united-states

Sen, N. J. (2021). *The big read in short: Covid-19 'info war'-it's not just the virus wreaking havoc* (2021). Retrieved 14 June 2021, from https://www.todayonline.com/big-read/big-read-short-covid-19-info-war-its-not-just-virus-wreaking-havoc

Son, T. (2020). *Three celebrities cough up $430 each for fake coronavirus posts*. Retrieved 8 June 2021, from https://e.vnexpress.net/news/life/culture/three-celebrities-cough-up-430-each-for-fake-coronavirus-posts-4054019.html

UNESCO. (2020). *Media and information literacy education in Asia*. Retrieved 14 July 2021, from https://unesdoc.unesco.org/ark:/48223/pf0000374575

UNICEF. (2021). *Digital literacy in education systems across ASEAN*. Retrieved 14 July 2021, from https://www.unicef.org/eap/media/7766/file/Digital%20Literacy%20in%20Education%20Systems%20Across%20ASEAN%20Cover.pdf

Valencia, S. (2021). *Misinformation online is bad in English. But it's far worse in Spanish*. Retrieved 30 October 2021, from https://www.washingtonpost.com/outlook/2021/10/28/misinformation-spanish-facebook-social-media

Walton, K. (2020). *Coronavirus boosts Indonesian anti-chinese conspiracies*. Retrieved 8 June 2021, from https://foreignpolicy.com/2020/01/31/wuhan-coronavirus-boosts-indonesian-anti-chinese-conspiracies

WHO. (2020). *Managing the COVID-19 infodemic: Promoting healthy behaviours and mitigating the harm from misinformation and disinformation*. Retrieved 20 April 2021, from https://www.who.int/news/item/23-09-2020-managing-the-covid-19-infodemic-promoting-healthy-behaviours-and-mitigating-the-harm-from-misinformation-and-disinformation