

HEALTH LITERACY EDUCATION AND RESEARCH IN THE PHILIPPINES: AN AGENDA FOR FILIPINO INFORMATION PROFESSIONALS DURING AND AFTER COVID-19

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VIEWPOINT

Abstract

This paper highlights the important role of health literacy during the COVID-19 pandemic, including how information professionals can help equip Filipinos with sufficient health literacy to protect them from similar global health crises in the future. While so much needs to be done to improve health literacy education, the author advocates for a greater research culture among information professionals (and students) so that we can generate locally made insights to influence health literacy policy, education, and research in the Philippines.

Keywords: Health Literacy, Health Literacy Education, Health Literacy Research, COVID-19

Global health crises, such as the Coronavirus Disease 2019 (COVID-19) pandemic, serve as a constant reminder of why we should pay attention to health literacy—the capability to acquire, understand, and use health information in a sound and ethical manner (Paakkari & Okan, 2020). As the world waits for a viable vaccine to control its spread (World Health Organization, 2020), health authorities globally have focused on three approaches in dealing with this pandemic: (1) providing symptomatic treatments to those affected in the absence of a specific cure (disease treatment approach); (2) screening individuals who are symptomatic and asymptomatic (disease mitigating approach); and (3) multichannel (i.e., mass media and social media) information, education and communication (IEC) campaigns to disseminate health information that would enable the

population to prevent infection (disease prevention approach). By principle, providing the population with health information aimed at health promotion and disease prevention should yield the greatest effect to flatten the curve and prevent the healthcare system from collapsing. However, similar to the concept of herd immunity, the positive health outcomes of the IECs mentioned above can only be attained when most people have the sufficient level of health literacy to translate health information into good health behaviors (e.g., frequent handwashing, observing social distancing, and wearing face masks).

As of December 2020, the Philippines has 454,447 COVID-19 cases and 8,850 deaths (Department of Health, 2020). To put it into perspective, the Philippines is one of the top countries in Southeast

Asia with the highest COVID-19 morbidity and mortality (Center for Strategic & International Studies, 2020). Considering that global health crises are also information crises (Xie et al., in press), the worsening COVID-19 situation in the Philippines is, perhaps, a manifestation of decades-long problem with poor health literacy which inhibits the translation of health information into appropriate health behaviors. One representation of this is the disregard of social distancing measures in public areas (Dela Cruz, 2020).

However, there are several warning signs that show the poor state of health literacy among Filipinos even before the pandemic. For instance, the findings of the 2018 Programme for International Student Assessment (PISA) by the Organization for Economic Co-operation and Development (OECD) where Filipino students rank among the lowest in reading, mathematics, and science (Paris, 2019) suggest that our youth may have difficulties in attaining good health literacy. This is based on the notion that health literacy requires skills derived from basic literacy to be applied in health situations (National Network of Libraries of Medicine, n.d.). Next, medical and industry leaders have pointed out that while health and medical information is available, “many Filipinos fail to comply with what is needed and must be done about their health” because of poor health literacy (Mateo, 2014, para. 4).

Local research also suggests how prevalent poor health literacy is among Filipinos. Based on the first national health literacy survey among 2,303 Filipinos aged 15–70 (Tolabing, 2020), the national prevalence of limited health literacy is about 51.5% and sub-national prevalence ranges from 48.2% to 65.4%. Next, a survey of more than 800 middle school students (i.e., 10–17 years old) from the northern and southern regions of the country showed “low” health literacy in several topics, such as nutrition, consumer health, and substance use and illegal drugs (Javier et al., 2019). What is noteworthy in that study was that topics related to the prevention of COVID-19 transmission, such as personal health and prevention and control of diseases, were rated “very low.” Likewise, a secondary analysis of a survey of

more than 2,000 Pasig City residents in Metro Manila aged 50–70 showed that 93.9% had problematic or inadequate health literacy levels (Agosto et al., 2018). This is an important public health concern since those that are aged 50 and above belong to the high-risk group as they comprise the largest proportions of COVID-19 deaths in the Philippines (Department of Health, 2020).

Although it may be difficult for Filipino information professionals to take part in improving health literacy during this pandemic, it is still possible to do this (Paakkari & Okan, 2020) and the points outlined in the following paragraphs can be used to prepare for future global health crises. Besides, whether COVID-19 happened or not, Filipino information professionals should help enhance Filipinos’ health literacy since it is an integral aspect of the implementing rules and regulations of the Republic Act 11223 or the Universal Health Care Law of 2019 (Department of Health, 2020). To clarify, I refer to information professionals as those that “*are engaged in the creation, organization, diffusion, and preservation of information and knowledge*” (Greer et al., 2007, p. 12). They may include, but not limited to, librarians, archivists, information and knowledge managers, information scientists, information systems specialists, information entrepreneurs, and records managers (Greer et al., 2007). The following paragraphs provide an agenda by which information professionals can improve health literacy in the Philippines through education and research during and after the COVID-19 pandemic.

While access to libraries and other forms of physical repositories of information is not possible, information professionals can serve as information hubs that would allow the public to obtain reliable information on COVID-19. As agents of information literacy (Bruce & Lampson, 2002), we should lend our knowledge and skills to help people obtain quality information that can improve health literacy about COVID-19 through various channels. For example, as an information scientist with an extensive background in public health, I have shared my insights on improving health literacy during the COVID-19 pandemic through a webinar (see

Bautista, 2020). Some of the salient points of the webinar were identifying COVID-19 health misinformation and directing people to reliable sources of information that they can also share with others. In partnership with the Philippine Association for Communication and Media Research, Inc. (2020), we conducted the webinar on April 21, 2020 via Zoom and livestreamed it on Facebook to extend reach. As of November 3, 2020, the video has been shared 79 times and reached >13,000 people. Information professionals can also help improve health literacy during the pandemic by translating COVID-19 IEC materials that are being shared on social media. For example, a private Facebook group (FightCOVID19 Volunteers PH, 2020) works with volunteers to translate English or Tagalog IEC materials from the Department of Health into other languages in the Philippines.

In the long term, information professionals should work with colleagues from other fields to advocate and improve health literacy education across all levels of the educational spectrum. Although Republic Act 10533 or the Enhanced Basic Education Act of 2013 facilitated the implementation of media and information literacy curriculum for senior high school students (Labangon & Zabala, 2018), the important role of health literacy during the COVID-19 pandemic and relevant research showing poor health literacy among Filipinos should serve as a catalyst for the inclusion of health literacy within information literacy-related curriculum, not only for secondary students but also for elementary and tertiary students. Echoing Badke's (2008) commentary on the role of information literacy in tertiary education, Filipino information professionals should also advocate making information literacy (a course that can incorporate health literacy topics) a mandatory course instead of an elective in colleges and universities. For instance, the School of Library and Information Studies at the University of the Philippines Diliman offers courses, such as *LIS 10: Information and Society (general education course)* and *LIS 50: Information Literacy* (for Bachelor of Library and Information Science students), that incorporate information and health literacy at the undergraduate level.

Aside from transmitting knowledge through education, information professionals also have the responsibility to create knowledge through research. There are several research directions in which Filipino information professionals can spearhead or work in collaboration with researchers from other fields, such as those in the health sciences (e.g., public health, medicine, nursing, etc.). First, research is needed to understand the relationship between health literacy and the resulting health behaviors and outcomes during the COVID-19 pandemic in the Philippines. Specifically, it is interesting to examine the role of health literacy, as well as eHealth literacy (see Bautista, 2015; Norman & Skinner, 2006), to Filipinos' extent of practicing social distancing and handwashing, including any experience of COVID-19 symptoms. Such research direction is based on prior work that shows the protective nature of health literacy against poor health outcomes, such as increased hospitalization rates and use of emergency services (Fabbri et al., 2018; Palumbo et al., 2016). Findings from such a study can provide a stronger case to intensify health literacy campaigns in the country to prepare for future pandemics or other global health crises.

Second, research is also needed to determine various sociotechnical determinants of health literacy among Filipinos including factors that have the greatest effect on it. While past studies based on nationally representative surveys suggest that financial poverty in Italy (Palumbo et al., 2016) and Internet access in the US (Jiang & Beaudoin, 2016) predict health literacy, empirical research on such factors, and other sociotechnical factors, based on nationally representative surveys are absent in studies in the Philippines. To date, Philippine-based studies on health literacy are either not based on nationally representative samples (Agosto et al., 2018; Javier et al., 2019) or are limited to those that link a few sociodemographic characteristics as predictors of health literacy (Tolabing, 2020). As an initial step to facilitate such studies, information professionals should call for the Philippine Statistics Authority (2018) to make the first National Health Literacy Survey dataset available to researchers for secondary analysis. Such dataset would help Filipino

information professionals to produce the much-needed health literacy insights similar to how researchers have utilized the US Health Information National Trends Survey (HINTS; National Cancer Institute, n.d.) to examine various factors related to health literacy (see Jiang & Beaudoin, 2016; Kobayashi & Smith, 2016).

Third, similar to studies that document the role of information professionals during seminal events in the Philippines, such as Typhoon Haiyan (Superio et al., 2019) and Marawi Siege (Superio et al., 2019), I also would like to take this opportunity to call for research that documents the role of information professionals in improving health literacy in the Philippines during and after the COVID-19 pandemic. Here, I outline some of the key questions that might be of interest: How did information professionals act as information agents to improve health literacy in the country? What were the challenges faced by information professionals when sharing information during the pandemic? How did information professionals leverage the COVID-19 pandemic to influence health literacy policy, education, and research in the Philippines? Perhaps, answers to these tough questions will take years to be uncovered but I hope that information professionals can consider them as future research endeavors. Insights from such studies are useful not only to improve health literacy policy, education, and research but also towards the advancement of information science education and research in the Philippines.

In summary, this paper highlights the important role of health literacy during the COVID-19 pandemic, including how information professionals can help equip Filipinos with sufficient health literacy to protect them from similar global health crises in the future. While so much needs to be done to improve health literacy education, I am advocating for a greater research culture among information professionals (and students) so that we can generate locally made insights to influence health literacy policy, education, and research in the Philippines. Although information science has a crucial role to play, we need to remember that the endeavor of

improving health literacy education and research would need coordination with other disciplines considering that complex health issues require interdisciplinary solutions (Atique et al., in press; Witteman & Stahl, 2013). Nonetheless, I hope that Filipino information professionals will greatly contribute to providing interdisciplinary solutions to address health literacy issues in the Philippines during and after the COVID-19 pandemic.

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REFERENCES

- Agosto, H. G. C., Briones, M. V. A., & Palatino, M. C. (2018). Correlates of health literacy among Filipinos aged 50-70 years old belonging to low-income families in a selected community. *Acta Medica Philippina*, 52(3), 239–244.
- Ahmed, F., Ahmed, N. E., Pissarides, C., & Stiglitz, J. (2020). Why inequality could spread COVID-19. *The Lancet Public Health*, 5(5), e240. [https://doi.org/10.1016/S2468-2667\(20\)30085-2](https://doi.org/10.1016/S2468-2667(20)30085-2)
- Atique, S., Bautista, J. R., Block, L. J., Lee, J. J. J., Lozada-Perezmitre, E., Nibber, R., O'Connor, S., Peltonen, L. M., Ronquillo, C., Tayaben, J., Thilo, F. J. & Topaz, M. (in press). A nursing informatics response to COVID-19: Perspectives from five regions of the world. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.14417>
- Badke, W. (2008). Ten reasons to teach information literacy for credit. *Online*, 32(6), 47–49.
- Bautista, J. R. (2015). From solving a health problem to achieving quality of life: redefining eHealth literacy. *Journal of Literacy and Technology*, 16(2), 33–54.
- Bautista, J. R. (2020). Mitigating health misinformation during the COVID-19 pandemic. Retrieved May 22, 2020, from https://www.researchgate.net/publication/341411821_Mitigatin

- g_Health_Misinformation_During_the_COVID-19_Pandemic
- Bruce, H., & Lampson, M. (2002). Information professionals as agents for information literacy. *Education for Information*, 20(2), 81–106. <https://doi.org/10.3233/EFI-2002-20201>
- Center for Strategic & International Studies (2020). Southeast Asia Covid-19 tracker. Retrieved May 17, 2020, from <https://www.csis.org/programs/southeast-asia-program/southeast-asia-covid-19-tracker-0>
- Dela Cruz, E. (2020). Philippines urges coronavirus vigilance as shoppers ignore safety protocols. *Reuters*. Retrieved June 4, 2020, from <https://www.reuters.com/article/us-health-coronavirus-philippines/philippines-urges-coronavirus-vigilance-as-shoppers-ignore-safety-protocols-idUSKBN22T0E3>
- Department of Health. (2019). Duque signs IRR of universal health care law. Retrieved May 22, 2020, from <https://www.doh.gov.ph/press-releases/duque-signs-irr-of-universal-health-care-law>
- Department of Health. (2020). COVID-19 Tracker. Retrieved May 17, 2020, from <https://www.doh.gov.ph/covid-19/case-tracker>
- Fabbri, M., Yost, K., Rutten, L. J. F., Manemann, S. M., Boyd, C. M., Jensen, D., Weston, S. A., Jiang, R., & Roger, V. L. (2018). Health literacy and outcomes in patients with heart failure: A prospective community study. *Mayo Clinic Proceedings*, 93(1), 9–15. <https://doi.org/10.1016/j.mayocp.2017.09.018>
- FightCOVID19 Volunteers PH. (2020). FightCOVID19 volunteers PH. Retrieved May 22, 2020, from <https://www.facebook.com/groups/2494812040833230>
- Greer, R. C., Grover, R., & Fowler, F. G. (2007). *Introduction to the library and information professions*. Libraries Unlimited.
- Javier Jr, R., Tiongco, M., & Jabar, M. (2019). How health literate are the igeneration Filipinos? Health literacy among Filipino early adolescents in middle schools. *Asia-Pacific Social Science Review*, 19(3), 16–29.
- Jiang, S., & Beaudoin, C. E. (2016). Health literacy and the internet: An exploratory study on the 2013 HINTS survey. *Computers in Human Behavior*, 58, 240–248. <https://doi.org/10.1016/j.chb.2016.01.007>
- Kobayashi, L. C., & Smith, S. G. (2016). Cancer fatalism, literacy, and cancer information seeking in the American public. *Health Education & Behavior*, 43(4), 461–470. <https://doi.org/10.1177/1090198115604616>
- Labangon, D. L., & Zabala, J. L. (2018). Towards a literate studentry: Media and information literacy implementation in the Philippines. Paper presented at 17th Congress of Southeast Asian Librarians. Naypyitaw, Myanmar.
- Mateo, I. (2014). Low health literacy level alarming, making Filipinos ‘more sick’ – doctor. *GMA News Online*. Retrieved May 17, 2020, from <https://www.gmanetwork.com/news/lifestyle/healthandwellness/366216/low-health-literacy-level-alarming-making-filipinos-more-sick-doctor/story/>
- National Cancer Institute. (n.d.). Health Information National Trends Survey. Retrieved June 4, 2020, from <https://hints.cancer.gov>
- National Network of Libraries of Medicine (n.d.). Health literacy. Retrieved May 17, 2020, from <https://nnlm.gov/initiatives/topics/health-literacy>
- Norman, C. D., & Skinner, H. A. (2006). eHealth literacy: Essential skills for consumer health in a networked world. *Journal of Medical Internet Research*, 8(2), e9. <https://doi.org/10.2196/jmir.8.2.e9>
- Paakkari, L., & Okan, O. (2020). COVID-19: Health literacy is an underestimated problem. *The Lancet Public Health*, 5(5), E249–E250. [https://doi.org/10.1016/S2468-2667\(20\)30086-4](https://doi.org/10.1016/S2468-2667(20)30086-4)
- Palumbo, R., Annarumma, C., Adinolfi, P., Musella, M., & Piscopo, G. (2016). The Italian health literacy project: Insights from the assessment of health literacy skills in Italy. *Health Policy*, 120(9), 1087–1094. <https://doi.org/10.1016/j.healthpol.2016.08.007>
- Paris, J. (2020). Philippines ranks among lowest in reading, math, and science in 2018 study. *Rappler*. Retrieved May 17, 2020, from <https://www.rappler.com/nation/246422-philippines-ranking-reading-math-science-pisa-study-2018>
- Philippine Association for Communication and Media Research, Inc. (2020). Research presentation: Mitigating health misinformation during the COVID-19 pandemic. On Viruses and Viral Information: A Webinar on Health Communication and Media Research. Retrieved May 24, 2020, from <https://www.facebook.com/PACMRI/videos/1441019226070164>

- Philippine Statistics Authority. (2018). PSA grants clearance to the National Health Literacy Survey. Retrieved June 5, 2020, from https://psa.gov.ph/sites/default/files/PR_NHLS_final.pdf
- Superio, D. L., Abaday, E. M., Oliveros, M. G. H., Delgado, A. S., Palloculo, V. E. V., & Geromiano, J. F. (2019). Fire+ water+ bombs: Disaster management among academic libraries in Marawi City, Lanao del Sur, Philippines. *International Journal of Disaster Risk Reduction*, *41*, 101311. <https://doi.org/10.1016/j.ijdr.2019.101311>
- Superio, D. L., Alayon, S. B., & Oliveros, M. G. H. (2019). Disaster management practices of academic libraries in Panay Island, Philippines: Lessons from Typhoon Haiyan. *Information Development*, *35*(1), 51–66. <https://doi.org/10.1177/0266666917725905>
- Tolabing, C. C. (2020). First national health literacy survey in the Philippines: Prevalence of limited health literacy at the national and subnational levels. Retrieved May 22, 2020, from <http://www.herdin.ph/index.php/component/herdin/?view=research&cid=72578>
- Witteman, H. O., & Stahl, J. E. (2013). Facilitating interdisciplinary collaboration to tackle complex problems in health care: Report from an exploratory workshop. *Health Systems*, *2*(3), 162–170. <https://doi.org/10.1057/hs.2013.3>
- World Health Organization. (2020). Draft landscape of COVID-19 candidate vaccines. Retrieved May 22, 2020, from <https://www.who.int/who-documents-detail/draft-landscape-of-covid-19-candidate-vaccines>
- Xie, B., He, D., Mercer, T., Wang, Y., Wu, D., Fleischmann, K. R., Zhang, Y., Yoder, L. H., Stephens, K. K., Mackert, M., & Lee, M. K. (in press). Global health crises are also information crises: A call to action. *Journal of the Association for Information Science and Technology*. <https://doi.org/10.1002/asi.24357>

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