Equipping Students and Beyond with Sound COVID-19 Knowledge to Survive and Thrive Despite the Pandemic

Chan, Helen University of Hong Kong, Hong Kong helenc98_1998@yahoo.com

Chu, SamUniversity of Hong Kong, Hong Kong | samchu@hku.hkGala, BhaktiCentral University of Gujarat, India | bhakti.gala@cug.ac.inIslam, Md. AnwarulUniversity of Dhaka, Bangladesh | anwar@du.ac.bd

Batool, Syeda Hina
University of Dhaka, Bangladesh | anwar@du.ac.bd
University of the Punjab, Pakistan | hina.im@pu.edu.pk
Bhardwaj, Raj Kumar
Lamba, Manika
University of Delhi, India | raajchd@gmail.com
University of Delhi, India | lambamanika07@gmail.com
University of Ruhuna, Sri Lanka | kanchana@lib.ruh.ac.lk

ABSTRACT

The COVID-19 pandemic necessitated the understanding of the infodemic for making informed decisions. Limiting the spread of health misinformation and disinformation was the primary goal of the health informatics project. The project became the recipient of the ASIS&T "Chapter Innovation of the Year Award 2021". A repertoire of online and offline initiatives was carried out with 9 well-researched videos for promoting health informatics. Since August 2021, thousands of academics, librarians, teachers, parents, and students from 16 countries and regions were invited to be science communicators to create and disseminate accurate health information in their areas through an international digital story writing competition. In this paper, we will discuss the strategies of responding to the information crisis, including employing interventions that protect against the infodemic and mitigate its harmful effects, to strengthen the resilience of individuals and communities in dealing with it in an information-resilient society.

KEYWORDS

Health informatics, COVID-19 infodemic, misinformation, disinformation, ASIS&T South Asia, Health Information Literacy

INTRODUCTION

Since the outbreak of COVID-19 in December 2019, the challenge of an overabundance of misinformation, and disinformation about the pandemic has heightened the importance of health information literacy. Health information literacy deals with the "ability of individuals to obtain, process, and understand basic health information and services needed to make appropriate health decisions (MLA, 2011). The authors expand the scope t include health informatics as an important component of the current study. Tedros Adhanom Ghebreyesus, the Director-General of the World Health Organisation (WHO) pointed out at the 2020 Munich Security Conference that "We're not just fighting an epidemic, we're fighting an infodemic" (Editorial, The LANCET Infectious Disease, 2020). Based on WHO's Public Health Research Agenda for Managing Infodemic as a reference, we seek the strategies for responding and deploying interventions that protect against the infodemic and mitigate its harmful effects, evaluating infodemic interventions, and strengthening the resilience of individuals and communities to infodemic, and promoting the development, adaptation, and application of tools for managing infodemic. The urgency of the action is especially important to the Asian countries with a population equivalent to 59.76% of the world's total population (Worldometer, 2022). Core members from 5 Asian countries/economies started the "Dealing with COVID-19 and saving people's lives in South Asia (SA) areas & beyond - Health Informatics Promotion Project" project in June 2021.

PROJECT GOALS AND METHODOLOGY

The Health Informatics Promotion Project was implemented under the collaborative effort of the core team members from Bangladesh, Hong Kong (China), India, Pakistan, and Sri Lanka. It was operated with funding from the Knowledge Exchange Project Fund of The University of Hong Kong and the ASIS&T Special Project Fund for the year 2021-2022. The major project goals included, (1). Spreading awareness about COVID-19 issues and behavior (2). Sharing the experience of countries with experience of dealing with similar viruses; (3). Helping to inform people by identifying pertinent topics to deal with COVID-19 and highlighting the importance of reliable and accurate information; (4). Identifying and sharing accurate and reliable information from authoritative information to fight misinformation and disinformation regarding COVID-19 and (5). Enhancing the accessibility of health information. The impact of the project was measured by collecting quantitative and qualitative data from the mixed methods approach. The survey covers people in rural areas and the underprivileged. Different exciting accomplishments have been achieved towards the goals of the Project by the team, such as the ASIS&T Chapter Innovation Award for the South Asia Chapter from ASIS&T after running the project for 4 months in 2021,

individual core members received the Letter of Recognition from the Executive Director of ASIS&T, Lydia Middleton, complement from participated academics, parents and students from different countries.

Usage of YouTube for COVID Health Information Advocacy

9 well-researched videos in five languages, including English, Bengali, Hindi, Urdu, and Sinhala, made up the total of 45 videos, which were ultimately uploaded to the 'ASIS&T South Asia' YouTube Channel (https://www.youtube.com/channel/UC-pt07aaW07tWg7InS2dSDg/videos). The videos' content was prepared using trustworthy sources, such as WHO, the Center for Disease Control and Prevention, authoritative websites from each country, and research-based journal articles.

The intervention design for actions from local to international Levels

To disseminate the videos to people in Asia and beyond, a repertoire of online and offline initiatives was carried out with the videos as the intervention design for action from local to international levels for mitigating the infodemic from June 2021 to May 15, 2022. To disseminate the video contains a series of initiatives such as the 'International Digital Story Writing Competition', 'Compete with Socrates', and 'Covid-19 Knowledge Challenge' was planned and executed.

International Digital Story Writing Competition

Based on the experiences of holding local and Asian-wide Digital Story Writing Competition in Hong Kong (China), the International Digital Story Writing Competition was launched in October 2021. Under the broader theme, "AI, Robot and Health" of the competition, students could write fiction or nonfiction specifying the use of technology in handling different health issues in the pandemic. Under the narrower theme, "COVID-19: Imagine, Create & Share", students could focus on one recent health issue that is affecting the entire world, including stopping the spread of health misinformation and disinformation. Ten free online workshops were held from Jan 1, 2022, to Mar 5, 2002, to prepare students for the Competition. Judges from 7 countries joined the International Digital Story Writing Competition judges' team. 1058 primary and secondary school students from 16 countries/regions registered for this exciting event. Lots of positive responses and compliments from school educators, parents, and students were received starting from the event kick-off. In total, 63 eBook submissions were received from the primary and secondary school students of 9 countries/regions, including Hong Kong (China), India, Qatar, Pakistan, Romania, Sri Lanka, Singapore, Malaysia, and Nepal.

Compete With Socrates

To enhance the critical thinking skills of students in combating the COVID-19 infodemic, the questioning activity "Compete with Socrates" was introduced to all International Digital Story Writing registrants after the seventh workshop on How to Learn the Art of Creating Questions. Four Processes of Comprehension were introduced in the workshop: (1) Retrieving explicitly stated information; (2) Inferences; (3) Interpret and integrating information; (4) Examine and evaluate information (Mullis & Martin (Eds.), 2015). To join this "really difficult challenge, students are requested to get the "secret link" to "unlock" the folder of the 9 videos about dealing with COVID-19 and create one question for each Process of Comprehension.

COVID-19 Knowledge Challenge

To help people stay safe and deal with COVID-19 with sound knowledge and inform people of the scientific facts and strategies of handling pandemics and misinformation from trustworthy sources in addition to accelerating their healthy information literacy, messages of "COVID-19 Knowledge Challenge!" have been widely disseminated to people of different areas by the project team starting from February 2022. After watching each of the 9 informative videos on combating COVID-19 and the infodemic, participants will ask to answer 3 questions. Those who pass this challenge and get at least 80% correct answers will get an electronic certificate to acknowledge their excellent knowledge in dealing with COVID-19. 98 children and adults, including Kindergartens, submitted their answers after one month.

A Series of Cross-boundary Webinars

To disseminate accurate COVID-19 knowledge, webinars with related topics were held in India, Bangladesh, Sri Lanka, Nepal, and Pakistan in November 2021. Parents, schoolteachers, and librarians of different areas benefited from professionals' sharing in the webinars.

CONCLUSION

Information resilience is a precondition to building a resilient community (Chaudhuri, 2022). In this paper, the strategies of responding to the information crisis, and employing interventions that protect against the infodemic and mitigate its harmful effects from local to international levels, were discussed to strengthen the resilience of individuals and communities to the infodemic for an information resilient Society. The provision of the right information at the right time in the right format with the right activities can facilitate individuals, including people of rural areas and the underprivileged, to take the right actions to protect themselves, their families, and communities against the COVID-19 pandemic. Right actions for handling crisis, transition, and resilience for an information-resilient society are not limited to researchers, scientists, educators, and politicians. We're all in this together.

REFERENCES

- Chaudhuri, Sabuj Kumar (2022). Information Resilience as a Precondition to Build a Resilient Community: A New Research Paradigm [Recording]. Retrieved from https://www.asist.org/information-resilience-a-precondition-to-build-a-resilient-community-a-new-research-paradigm/
- Editorial, The LANCET Infectious Disease (2020). "The COVID-19 infodemic". *The LANCET Discovery Science*. Retrieved from https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930565-X
- Medical Library Association (2011). What is health information literacy? Retrieved from https://web.archive.org/web/20150906122613/https://www.mlanet.org/resources/healthlit/define.html
- Hucíková, Anežka & Babic, Ankica (2017). "Medical Informatics Idle YouTube Potential". *National Library of Medicine:* National Centre for Biotechnology Information. Retrieved from https://pubmed.ncbi.nlm.nih.gov/28679905/
- McLachlan, Stacey (2022). "YouTube Stats That Matter to Marketers in 2022". *Hootsuite*. Retrieve from https://blog.hootsuite.com/youtube-stats-marketers/
- Michigan Engineering, University of Michigan (2022). The Six Type of Socrate Questions. Retrieved from http://problemsolving.engin.umich.edu/strategy/cthinking.htm
- Mulllis, Ina V.S., & Martin, Michael O. (Eds.). (2015). *PIRLS 2016 Assessment Framework (2nd ed.*). Chestnut Hill, MA, USA: TIMSS & PIRLS International Study Center.
- Niemiec, Emilia (2020). "COVID-19 and Misinformation: Is Censorship of Social Media a Remedy to the Spread of Medical Misinformation?" *EMBO Reports*, 21.11: E51420.
- Wikipedia (2022). Socrates. Retrieved from https://en.wikipedia.org/wiki/Socrates.
- World Health Organization (2022). Coronavirus disease (COVID-19) pandemic. Retrieved from https://www.who.int/emergencies/diseases/novel-coronavirus-2019?adgroupsurvey={adgroupsurvey}&gclid=CjwKCAjw3cSSBhBGEiwAVII0Z8cN208atggBDldE2BouNa4gAo4In5JucjEaelfW1mtdBNQnIIpWFxoCjeQQAvD_BwE
- Worldometer (2022). *Asia Population*. Retrieved from https://www.worldometers.info/world-population/asia-population/#:~:text=Asia%20population%20is%20equivalent%20to%2059.76%25%20of%20the%20total%20world%20population