Meeting Report

WHO online consultation meeting to discuss global principles for identifying credible sources of health information on social media

15 December 2021
Virtual Meeting

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1. Introduction

Background

The term infodemic is regularly used to describe the vast volume of information available on COVID-19. However, not only is some of the information produced about COVID-19 false, but some of it is harmful. Misinformation, defined as false information, and disinformation, defined as information created with the intention of causing harm or generating profit, is shared alongside credible information on social media platforms[1]. Due to the volume of information about COVID-19 and the speed with which it spreads, it can be difficult to identify what is credible.

To help address the spread of misinformation and disinformation, the World Health Organization (WHO) is working to make credible health information more accessible. The WHO is working with the technology industry to stop the spread of misinformation and disinformation[2] and has produced resources to help people identify non-credible sources of information[3].

As part of these efforts, the WHO set out to build upon a paper published by the U.S. National Academy of Medicine (NAM) in July 2021, "Identifying Credible Sources of Health Information in Social Media: Principles and Attributes". This paper summarizes work done by an independent advisory group to develop a set of principles that could be used by social media platforms to identify credible sources of health information. The authors note that social media platforms have the ability and responsibility to increase access to high-quality and evidence-based health information. The principles and attributes identified in the paper are to help enable social media platforms to do this[4].

The recommendations published in this paper were well received by social media companies in the United States of America (USA). However, WHO recognized the need for the recommendations in this paper to be applicable globally. So the WHO, in partnership with the NAM and British Medical Journal (BMJ), organized a meeting with global health experts to discuss whether the principles and attributes identified in the NAM paper could be applied by social media platforms globally.

Meeting organization

An online consultation meeting was hosted by the WHO Digital Channels Team, in close collaboration with NAM, and facilitated by BMJ on 15 December 2021. Fifteen global health experts with backgrounds in public health and health communication participated in the meeting. Participants joined from the USA, United Kingdom, Italy, Nigeria, South Africa, Lebanon, India, Singapore, and Vietnam. The list of participants can be found in Annex I.

[1] https://www.who.int/news-room/spotlight/let-s-flatten-the-infodemic-curve
[2] https://www.who.int/teams/digital-health-and-innovation/digital-channels/combatting-misinformation-online
[3] https://www.who.int/news-room/spotlight/let-s-flatten-the-infodemic-curve
[4] Raynard K, Arnesen S, Chou WY S, Curry S, Lazer D, Villarruel A. Identifying Credible Sources of Health Information in Social Media: Principles and Attributes. *NAM Perspectives* July 2021 https://nam.edu/identifying-credible-sources-of-health-information-in-social-media-principles-and-attributes/. Reprinted by permission from the National Academy of Medicine.

Meeting objectives

The **objectives** of the meeting were:

1) to review the paper published by NAM
2) to discuss whether the principles and attributes for identifying credible sources of health information on social media (Table 1) can be applied globally; and
3) to discuss if there are any challenges to applying the principles in different regions.

Table 1: Foundational Principles and Attributes of Credible Sources of Health Information

Foundational Principle	Attributes
Science-Based: Sources should provide information that is consistent with the best scientific evidence available at the time and meet standards for the creation, review, and presentation of scientific content.	• Acknowledges the limitations and evolution of knowledge (e.g., early or incomplete knowledge, as seen in the COVID-19 pandemic; small sample size; correlation versus causation, etc.) • Clearly labels information with the date it was last updated and strives to reassess and update content • Demonstrates subject-specific expertise (i.e., consistent and well-regarded contributions in a given field) • Links to and is linked to by other credible sources [a] • Provides citations for information shared and evidence to justify claims • Synthesizes information from multiple sources, rather than a single source • Uses a consensus process to develop the information shared [b] • Uses peer review or another form of content review to vet information before sharing [c]
Objective: Sources should take steps to reduce the influence of financial and other forms of conflict of interest (COI) or bias that might compromise or be perceived to compromise the quality of the information they provide.	• Keeps health information separate from financial, political, or ideological messages • Maintains independence from funders [d] • Separates lobbying activities from health information (or does not engage in lobbying) • Does not include advertisements with relevant health information (or does not host advertisements at all) [e]
Transparent and Accountable: Sources should disclose the limitations of the information they provide, as well as conflicts of interest, content errors, or procedural missteps.	• Discloses financial and nonfinancial conflicts • Discloses relevant policy positions and lobbying activities • Follows FACA regulations or similar transparency policies [f] • Posts public corrections or retractions • Prioritizes accessibility and equitable access to information • Provides a mechanism for public feedback • Shares data, methods, or draft recommendations

a. For example, an organization could seek public comments on an interim set of health guidelines before finalizing and sharing the information more broadly.
b. A consensus process involves assembling a group of experts with diverse perspectives who assess a body of evidence and deliberate in order to arrive at an opinion or guidance that reflects the consensus of the group.
c. A peer-review process involves sharing the draft of a publication or other product with reviewers who have expertise or experience in the given topic and can provide feedback as to the product's accuracy, balance, and appropriateness.
d. For example, an academic journal could maintain editorial independence (i.e. sole authority over published content) from the organization that funds it.
e. For example, an organization might host an advertisement for a cancer drug but keep this advertisement separate from the information it shares about cancer.
f. FACA stands for the Federal Advisory Committee Act, which established requirements for committees that advise the federal government. These requirements include public access to meetings and meeting notes, as well as summaries of expenditures (https://www.gsa.gov/policy-regulations/policy/federal-advisory-committee-management/advice-and-guidance/the-federal-advisory-committee-act-faca-brochure)

Source: Raynard K, Arnesen S, Chou WY S, Curry S, Lazer D, Villarruel A. Identifying Credible Sources of Health Information in Social Media: Principles and Attributes. *NAM Perspectives* July 2021 https://nam.edu/identifying-credible-sources-of-health-information-in-social-media-principles-and-attributes/. Reprinted by permission from the National Academy of Medicine.

2. Proceedings

Opening remarks

Andy Pattison, Team Lead of Digital Channels at the WHO welcomed participants to the meeting. He described the purpose of the Digital Channels team, the three pillars of their work and how they have been working with the technology industry to fight misinformation during the pandemic. He congratulated and acknowledged the NAM authors for their paper and explained that the goal is to build on their work and see how the paper can be taken to a global audience. He mentioned that the plan after the meeting is to talk to social media companies and encourage them to use the principles.

Pattison's welcome was followed by an introduction by Dr Ashley McKimm, Director of Partnerships at BMJ. McKimm echoed support for this work and thanked WHO and NAM for their partnership. Ashley presented the names of all the participants, facilitators and organizers and described the agenda for the meeting. He mentioned that the meeting was being recorded for internal purposes and that the meeting was following Chatham House Rules.

An introduction was then given by Dr Victor J. Dzau, the president of NAM. He gave a brief overview of NAM and also expressed NAM's interest in collaborating with WHO and BMJ on this work. He acknowledged social media companies' responsibility to support access to high-quality health information and gave a brief overview of the work the NAM team did with YouTube as a starting point to address the issue.

Next, Dr Raynard Kington, Head of School at Phillips Academy, Andover, and former Principal Deputy Director of the U.S. National Institutes of Health presented the NAM paper. He mentioned that the project to develop the paper began in February 2021 and that YouTube provided $100,000 in funding to support NAM staff's facilitation of the project. An advisory group was assembled in late February 2021 with four deliberative sessions between March and April 2021. The advisory group members included Kington, Stacey Arnesen (U.S. National Library of Medicine), Wen-Ying Sylvia Chou (U.S. National Cancer Institute), Sue Curry (University of Iowa), David Lazer (Northeastern University) and Antonia Villarruel (University of Pennsylvania). There was a public comment period and webinar in April 2021 and the final peer-reviewed discussion paper was published in *NAM Perspectives* in July 2021.

Kington described the scope and parameters of the paper. The authors limited their scope to assessing the credibility of a) sources of information (rather than the information itself), b) government and nonprofit organizations (rather than for-profit companies and individuals) and 3) U.S. based organizations (rather than international). He acknowledged that the paper offers "initial principles and attributes for consideration," and is therefore only a starting point for what should be an ongoing process. Kington presented some key terms from the paper, such as how they defined "credible." He provided an overview of the principles, categories of vetting mechanisms and credibility assessment steps as described in the paper. Finally, he provided parallel strategies proposed by the authors to supplement source assessment and mentioned some of the ethical and public health considerations.

Methods

After the welcome and introductions by WHO, BMJ and NAM, participants were randomly assigned to one of three breakout groups which were chaired and facilitated by BMJ staff and organized through Zoom. There were three breakout sessions lasting 20 minutes each and notes were captured online using Miro, a virtual whiteboard. During the first breakout session, all the groups discussed "Are the existing principles appropriate to a global setting?". Each group then discussed the attributes of one of the principles in detail and in the final session all the groups were asked, "How do the principles and attributes fit in different regions and countries? Are there any challenges or caveats that need to be considered?". Between the breakout sessions, everyone came back together for 10 minutes and the chairs provided a summary of what their group discussed. For the complete agenda, please see Annex II.

Summary of findings

Can the principles be applied globally?

There was consensus among all participants that the principles, "science-based", "credible" and "transparent and accountable" and the attributes attached to these principles can broadly be applied globally. The principles were seen as laudable and something health information providers and social media platforms should hold to.

Challenges

While the "science-based" principle was generally more straightforward to apply in a global context, the principles of being "objective" and "transparent and accountable" posed more challenges. There was agreement among participants that these principles could mean different things in different settings and that factors such as culture, language, the influence of the source of information and political views within the country can affect what is seen as credible. Participants noted that health information is quite often shared in different languages across different social media platforms. There may be one original source, but content gets translated, reshared, repurposed, taken out of context and subjected to different policies on different platforms. Participants also noted that not all information is equally consequential. Sometimes what is getting the most airtime on social media is not necessarily newsworthy and deemed to be misinformation or an insignificant issue by health professionals. Furthermore, issues such as vaccine hesitancy may not be as big of an issue in countries where vaccines are not available. The participants stressed that understanding the local context was important.

Early on in the discussion participants noted that there are widespread issues with digital access across the globe and within countries themselves, so this was something to keep in mind when thinking about whether the principles can be applied globally. Another important point raised was that information needs to be presented in a way that can be understood - whether that's through accessible language or for some groups, particularly those with low health literacy, through visual media such as images. However, it can be harder to assess information quality in content that is not text-based.

Science-based

For the "science-based" principle and attributes, a participant highlighted the challenge with the attribute "acknowledges the limitations and evolution of knowledge". For example, information around COVID-19 is constantly evolving, and communicating what is known and unknown can potentially come across as being uncertain which might not be seen as credible to the general public. Thus, it is important to ensure that the messaging is clear and in a format that a layperson can understand.

Participants highlighted that not all scientific evidence can be applied universally and sometimes the evidence presented only applies to certain geographies or certain patient groups. This could lead to misinterpretation, especially on platforms where only bite-sized information or a tagline is shared. A participant also flagged that countries follow different date formats which can pose a challenge for consumers in assessing how up to date the information is.

In some contexts, religious sources and indigenous medicine are seen as more credible than western sources of health information, which presents challenges for applying this principle globally. The attribute, "links to and is linked to by other credible sources" within the science-based principle, was also seen to be a challenge when applying it to the global context. There could be tensions between global/international organizations and local/regional organizations, and so the sources that are linked by the original source should also be examined and may differ depending on local ideologies.

Finally, the participants raised the importance of peer review. Peer review itself can be of variable quality, in the case of some predatory journals not conducted at all, and this undermines the whole process of quality science-based information.

Objective, transparent and accountable

For the principles and attributes of "objective" and "transparent and accountable", there were a lot more challenges that participants identified. Participants raised the issue that there are often conflicts within countries themselves as to what is seen as credible. For instance, the messaging coming from the government could be opposite to what the scientific community is suggesting. The government could dismiss the effectiveness of masks or believe COVID-19 does not exist. There could also be non-governmental institutions that are highly regarded and seen as a source of trusted information. This affects the public health messaging and subsequently what citizens may view as credible. Therefore, in some settings, it may be difficult to keep health information separate from financial, political or ideological messages.

Participants flagged that disclosing financial and non-financial interests could be problematic and interpreted in different ways. An example given by a participant was that in their country if you disclose that you are funded by a foreign organization, it can become problematic, even though it may be considered a credible organization in most contexts. The participant mentioned that you can end up spending a considerable amount of time defending yourself against the disclosures, confirming that you are not being influenced by the foreign funders.

Participants also raised the issue that certain individuals who are affiliated with institutions that are generally accepted as credible sources of health information may not be sharing high-quality health

information themselves, so it is the actual and “formal” voice of the institution which should be seen as a credible source of information and not necessarily all the individuals within it.

One point raised was the need to understand business models for high-quality information sources in different parts of the world as sometimes credible sources may not be able to forgo advertising and following the attributes strictly could potentially exclude some high-quality credible sources of information. It was clear, however, that advertising within a source of health information would need to be closely looked at. An example of a problematic interaction between advertising and health information is anti-vaccination websites which sometimes try to sell unproven health products or charge a fee “to view the full video”. A suggested attribute to include in the principles of “transparent and accountable” was “does not sell a product”. Similar to this suggestion was adding the attribute “does not harm anyone”.

3. Conclusions

Although the participants noted that there would be some challenges in applying the principles and attributes in different contexts, there was consensus that they could be applied globally.

Suggestions for social media platforms

While the principles were seen as important for social media platforms to use to help identify credible sources of health information, participants felt that these principles could also be used to help guide content creators/influencers on social media platforms, so they use credible sources of health information themselves when sharing with their audiences. Participants felt that the principles and attributes could guide producers of information in developing their own high-quality content and serving as credible sources of health information.

Participants also strongly felt that the general public needs media literacy training on how to identify whether the health sources they come across online are credible or not. Social media companies should consider media literacy programmes to support this aim.

Furthermore, participants acknowledged complexities and importance of content moderation on social media. It was suggested that social media platforms should strive to provide content moderation in as many markets and languages as realistically possible to identify and act upon sources of misinformation. Content moderation was suggested not only for main posts but the comment section as well, as sometimes individuals spread misinformation in the comment section of credible sources of health information.

In addition, participants acknowledged that social media platforms are all different with varying content formats and policies, and thus having recommendations that are applicable to different types of social media platforms could be helpful.

Finally, social media companies are strongly encouraged to make a commitment to supporting their users in the journey of attaining the highest possible standard of health, eliminating misinformation from their platforms, and actively sharing information on what they are doing to reach these goals. They should strive for deeper and more meaningful collaborations with authorities and researchers to find common solutions. Transparency and accountability should be front and center in all plans and activities that pertain to health and safety of people.

Annexes

Annex I: List of Participants and Facilitators

Participants:

Name	Position, Institution
Raynard Kington	Head of School at Phillips Academy in Andover, USA
Stacey Arnesen	Deputy Chief, Public Services Division, National Library of Medicine, USA
Wen-Ying (Sylvia) Chou	Program Director in the Health Communication and Informatics Research Branch of the Behavioral Research Program at the National Cancer Institute, USA
Antoni M. Villaarruel	Professor and Margaret Bond Simon Dean of Nursing and Senior Fellow, Leonard Davis Institute of Health Economics at the University of Pennsylvania, USA
Victor Joseph Dzau	President of the United States National Academy of Medicine, USA
Brenda Crabtree	Infectious Disease specialist at the Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán INCMNSZ and Assistant Professor of the HIV / AIDS Program, UNAM, Mexico
Martin McKee	Professor of European Public Health at the London School of Hygiene and Tropical Medicine, UK
Alessandro Lovari	Assistant Professor of Sociology of Communication at the University of Cagliari, Italy
Amobi Theresa Ifeoma	Senior Lecturer at the Department of Mass Communication, University of Lagos, Nigeria
Charles Shey Wiysonge	Director of Cochrane South Africa at the South African Medical Research Council, and an Honorary Professor of Epidemiology and Biostatistics at the University of Cape Town, South Africa
Marcus Bardus	Assistant Professor at the Department of Health Promotion and Community Health, Faculty of Health Sciences, American University of Beirut
Gagandeep Kang	Professor of Microbiology, at the Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences at the Christian Medical College, India
Mary Chambers	Head of Public and Community Engagement, Oxford University Clinical Research Unit, Vietnam, Nepal, Indonesia
Taberez Ahmed Neyazi	Assistant Professor of New Media and Political Communication, National University of Singapore
David Lazer	Distinguished Professor in the Network Science Institute at Northeastern University, USA
Holly Rhodes	Director, Standing Committee on Advancing Science Communication, National Academies of Sciences, Engineering, and Medicine, National Academy of Medicine, USA

Hosts and Facilitators:

Name	Position, Institution
Andy Pattison	Team Lead of Digital Channels, World Health Organization
Monta Reinfelde	Technical Officer, Digital Communications, World Health Organization
Ashley McKimm	Director of Partnership Development, BMJ
Kieran Walsh	Clinical Director, BMJ
Paul Simpson	International Editor, BMJ
Morgan Kindberg	Programme Manager, BMJ
Lalitha Bhagavatheeswaran	Engagement and Knowledge Manager, BMJ
Mark Lenner	Junior Conference Producer, BMJ
Camille Kelly	Marketing Manager, BMJ
Laura DeStefano	Director of Strategic Communications & Engagement, NAM

Annex II: Agenda

Welcome (5 minutes)
Andy Pattison, Team Lead, Digital Channels WHO
Ashley McKimm, Director of Partnerships, BMJ

Introduction NAM (5 minutes)
Victor J. Dzau, President, US National Academy of Medicine

NAM paper presentation (10 minutes)
Raynard Kington, Head of School at Phillips Academy, Andover, and President Emeritus of Grinnell College

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Breakout 1 (20 minutes) **+ regroup** (10 minutes)
Are the existing principles appropriate to a global setting? Are there any other principles to add? If any of these principles cannot be applied globally, why not and to what extent?

Breakout 2 (20 minutes) **+ regroup** (10 minutes)
Each group assigned one of the three principles to review its attributes and identify any attributes that are missing

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Breakout 3 (20 minutes) **+ regroup** (10 minutes)
How do the principles and attributes fit in different regions and countries? Are there any challenges or caveats that need to be considered?

Next steps and close (5 minutes)
