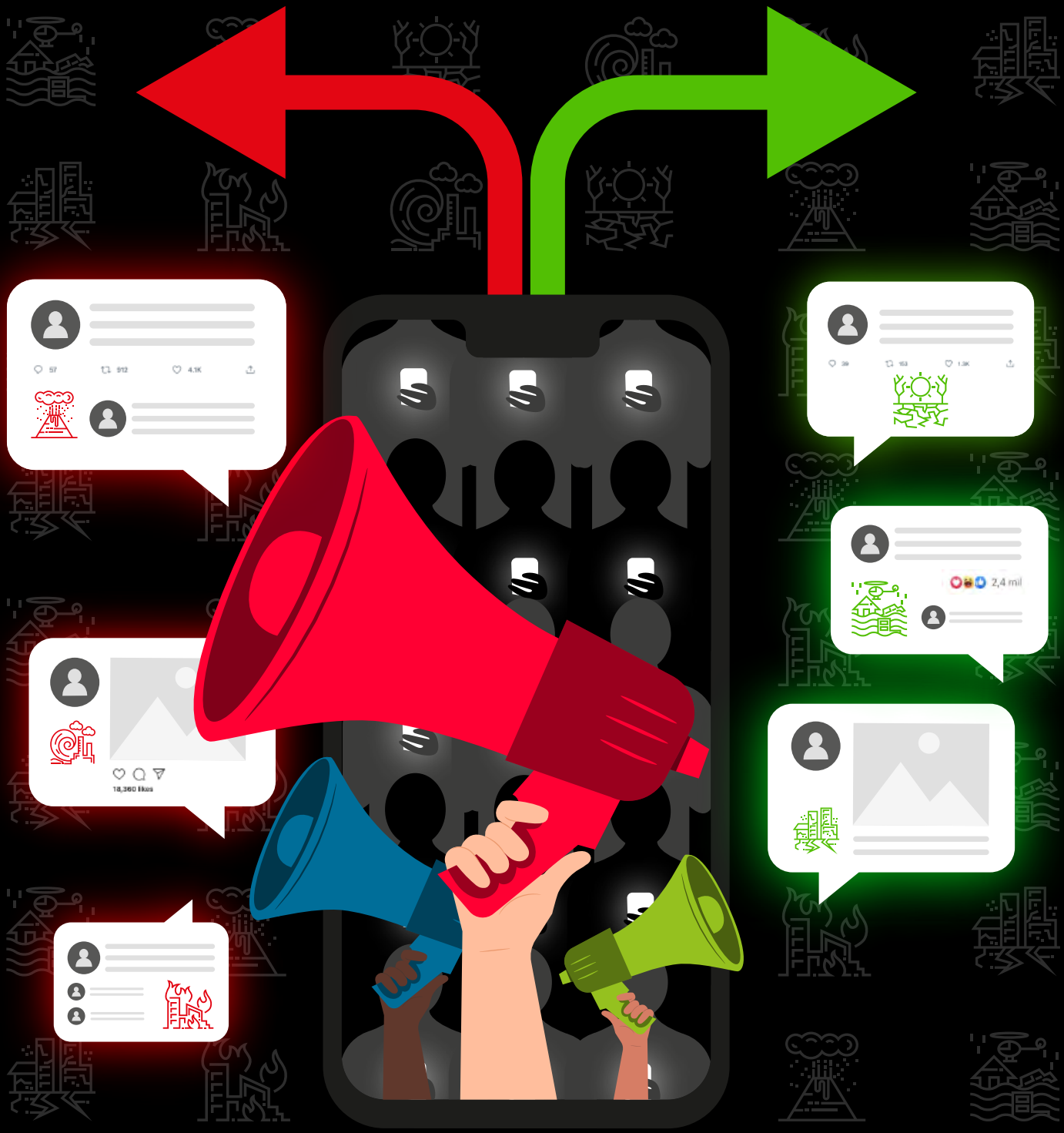
Mis & Disinformation:
Handling the 21st Century Challenge in the Humanitarian Sector



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Mis & Disinformation: Handling the 21st Century Challenge in the Humanitarian Sector

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Interviewees

I would like to extend my deepest gratitude to the nine individuals who took the time to meet with me to share their ideas, thoughts and expertise on the spread of MDH and its potential implications for the international humanitarian community. Without their contributions, this report would not have been as compelling.

Name	Organization
Alessandra Vellucci	United Nations Office at Geneva
Anahi Ayala Iacucci	Independent consultant
Anonymous	International Committee of the Red Cross
Carlos Castillo	Universitat Pompeu Fabra
Gabby Lim	PhD candidate at the University of Toronto; Citizen Lab; Harvard Shorenstein
Nancy Claxton	Nadulpan
Sara-Jayne Terp	Threet Consulting
Sarah Vieweg	Twitter
Tara Kirk Sell	Johns Hopkins Center for Health Security

Key messages

Mis and disinformation have become more pervasive in several discourses, including humanitarianism.

The COVID-19 pandemic has led to an 'infodemic', which is defined as an overabundance of information and the rapid spread of mis and disinformation.

Infodemics have occurred alongside previous epidemics, but not on the global scale we are witnessing today. Contributing factors for this include:

- The plethora of social media platforms and the technological architecture that run them, such as algorithms, bots and fake accounts.
- The COVID-19 pandemic and the influx of information, good and bad, online.
- The changing demographic of social media users – to younger generations, such as Generation Z, millennials and Generation X –and their content consumption.
- A lack of sufficient digital literacy and critical-thinking skills in today's media-rich environment.
- Underlying social, cultural and political issues.

Given the pervasiveness of mis and disinformation in several domains, there is reason to believe the humanitarian sector is highly susceptible to becoming a direct or indirect target on a regular basis.

Several instances in which mis and disinformation have implicated humanitarian relief efforts have already occurred. They include but are not limited to:

- Brazil and the Zika virus, 2015
- The Democratic Republic of the Congo and the Ebola virus, 2018
- South Sudan and the refugee crisis, 2003-2020
- Syria and the White Helmets, 2018
- The United States of America and COVID-19, 2020
- The Israeli and Palestinian conflict in Gaza, 2021

Some humanitarian organizations have taken steps to implement measures to monitor and counter misleading content. They include but are not limited to:

- World Health Organization
- United Nations Global Pulse and Verified Initiatives
- Internews
- InterAction

The humanitarian sector has not dedicated sufficient analytical resources to implement the prevention and mitigation measures commensurate with the threats posed.

To help mitigate future threats, the humanitarian sector must fundamentally rethink its approach to mis and disinformation and improve its communication strategies, cross-sector collaboration, standardized processes, and online and offline engagement with affected communities.

Introduction

Over the past few decades, there has been a market shift from traditional media sources, such as print publications and broadcast news, to social media platforms accessible on mobile devices. The digital media landscape has given billions of people who share similar opinions and cultural beliefs the opportunity to connect and communicate instantaneously.[1] In the context of humanitarian crises, this relatively new phenomenon has introduced new opportunities and risks. Perhaps the most significant opportunity is that affected populations can more easily find and share vital information. At the same time, significant risks exist for individuals to spread misinformation, ("false information that is spread, regardless of whether there is intent to mislead"), or for malevolent actors to spread disinformation ("deliberately misleading or biased information, manipulated narrative or facts, or propaganda"), especially amid the chaos of the early days of a natural disaster or emergency.[2]

In recent years, misinformation, disinformation and hate speech (MDH) have become more pervasive in discourses across social media platforms. Given this pervasion of MDH, we believe that the humanitarian sector is highly susceptible to becoming the indirect or direct target of malicious campaigns. If the humanitarian sector leaves the spread of misleading information unchecked, it could undermine people's trust in humanitarian organizations, affecting their ability to operate on the ground and coordinate an effective response.[3]

The purpose of this report is to alert the humanitarian sector to the spread of MDH across social media platforms and its potential implications for future humanitarian response.

To contextualize the report and outline potential patterns of concern, we have included several examples of humanitarian organizations and related bodies becoming direct and indirect targets of mis and disinformation campaigns.

We then examined the overabundance of information and the rapid spread of misleading information or fabricated news related to the COVID-19 pandemic; outlined the international humanitarian community's use of new and emerging technologies to prevent and mitigate the potential harms of MDH related to the pandemic; provided recommendations for improvement; and addressed potential barriers and future concerns

1 "How to Use Social Media to Engage with People Affected by Crises: ICRC, IFRC, and UNOCHA release a brief guide for humanitarians." International Committee of the Red Cross, October 2017, accessed July 2021, https://www.icrc.org/en/document/social-media-to-engage-with-affected-people; "Number of Social Network Users Worldwide from 2017 to 2025 (in billions)." Statista, accessed July 2021, https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/.

2 "News: Fake News, Misinformation & Disinformation." UW Bothell and Cascadia College, accessed July 2021, https://guides.lib.uw.edu/c.php?g=345925&p=7772376.

3 "How to Use Social Media to Engage with People Affected by Crises." International Committee of the Red Cross.

The 'Infodemic'

What is it?

The term 'infodemic' first emerged during the SARS epidemic outbreak in 2003. In an opinion piece for the Washington Post, political scientist David J. Rothkopf described the information landscape as:

> *"A few facts, mixed with fear, speculation, and rumor, amplified and relayed swiftly worldwide by modern information technologies, have affected national and international economies, politics, and even security in ways that are utterly disproportionate with the root realities."*[4]
>
> — David J. Rothkopf

In February 2020, WHO revived the term "infodemic" during the COVID-19 pandemic to characterize the overabundance of information and the "rapid spread of misleading or fabricated news, images, and videos."[5] The evolving science and public messaging around the virus, compounded by the oversaturation of information on social media and communication platforms, have made it increasingly difficult for the public to discern fact from falsehood. As the WHO Director-General, Tedros Adhanom Ghebreyesus, put it: "We're not just battling the virus, we're also battling the trolls and conspiracy theorists that push misinformation and undermine the outbreak response," and, as a result, are re-evaluating humanitarian approaches to managing infodemics at the onset of disasters and emergencies.[6]

4 Ben Zimmer. "'Infodemic': When Unreliable Information Spreads Far and Wide." The Wall Street Journal, March 2020, accessed August 2021, https://www.wsj.com/articles/infodemic-when-unreliable-information-spreads-far-and-wide-11583430244.

5 "Immunizing the public against misinformation." World Health Organization (August 2020), accessed August 2021, https://www.who.int/news-room/feature-stories/detail/immunizing-the-public-against-misinformation; Tara Kirk Sell et al. "National Priorities to Combat Misinformation and Disinformation for COVID-19 and Future Public Health Threats: A Call for a National Strategy." Johns Hopkins: Center for Health Security (March 2021): 2.

6 "Immunizing the public against misinformation." World Health Organization.

Why is it Happening Now vs. the Past?

Infodemics have occurred alongside previous epidemics, such as SARS between 2002 and 2004, but not on the global scale that we are witnessing today.[7] Yet the questions remain: Why is it happening now at such a scale? What has changed?

Since the early 2000s, the plethora of social media platforms has created a social media ecosystem in which people can connect and communicate instantaneously while accessing and sharing information like never before. For the humanitarian system, this ecosystem presents new opportunities and risks. On one hand, it allows humanitarian organizations to coordinate among themselves and connect with local actors to better organize relief efforts, disseminate life-saving information and maintain a feedback loop.[8] On the other hand, the ecosystem provides fertile ground for an information vacuum and the spread of MDH in the aftermath of humanitarian crises.[9]

> *"Today, you have social platforms and the technological architecture that run them, such as algorithms, bots and fake accounts that allow for content to spread at a huge scale. You also have the fact that we can all become agents of misinformation as we forward information and contribute to the spread, even if it's unintentional."*
>
> — Anonymous

Given the current context of the COVID-19 pandemic and growing levels of uncertainty and anxiety surrounding the variant strains, people are frantically seeking information to help alleviate the fear of the unknown and make informed decisions for themselves and their families.[10] With the sudden influx of information online — in terms of its volume, velocity, veracity and variety — life-saving information surrounding COVID-19 is easily accessible. But the problem is that much of the information people consume is not from trustworthy, verified sources.

7 Ibid.

8 "The Promise of Social Media for Humanitarian Action." ReliefWeb, May 2012, accessed August 2021, https://reliefweb.int/report/world/promise-social-media-humanitarian-action.

9 "Q&A: Humanitarian operations, the spread of harmful information and data protection." International Review of the Red Cross, IRRC No. 913 (March 2021), accessed August 2021, https://international-review.icrc.org/articles/humanitarian-operations-harmful-information-data-protection-913.

10 Janice Babineau. "Tech Talk: Why misinformation can be dangerous in disasters." Canadian Red Cross Blog (April 2017): accessed August 2021, https://www.redcross.ca/blog/2017/4/tech-talk-why-misinformation-can-be-dangerous-in-disasters.

Example 1: The Zika Virus

In early 2015, the Zika virus emerged in Brazil and spread rapidly through 48 countries and territories in the Americas. Its rapid spread and known association with congenital microcephaly and other neurologic disorders in pregnancy led the World Health Organization (WHO) to declare it a Public Health Emergency of International Concern the following year.

As the virus spread prolifically, so did misinformation about its causes and effects. The accounts of misinformation ranged from a declaration that genetically modified mosquitoes were introduced to Brazil, to the idea that a larvicide was the cause of microcephaly in infants in Brazil, to a belief that vaccines dispensed by the Brazilian Government were responsible for birth defects. Most of the misinformation was being spread on social media platforms, where information is rarely verified and the platforms' algorithms and consumer engagement help to propel its spread. The misinformation accounts had immense implications for Government institutions and public health officials, who sought to control the spread, as well as the health and well-being of the affected populations.

> ***"What has really changed is that we entered an active crisis. We are going to have misinformation because people are seeking information and what's available may not be verified, credible, relevant, or accurate. When these moments of crisis happen, combined with news coverage, we end up with a vacuum of credible and authoritative information, which is then filled with speculation, rumours, or unverified information. But it's worse with COVID-19 because it's a pandemic that's affecting every country of the world."***
>
> — Gabby Lim

Unverified and often misleading information has the potential to incite fear and cause significant harm. This is especially true when combined with issues such as rapid digitalization, demographic changes, lack of digital literacy or critical-thinking skills, and/or underlying social, cultural or political issues.[11]

11 "Q&A: Humanitarian operations, the spread of harmful information and data protection." International Review of the Red Cross.

> *"What has changed is that there are so many more people on social media and the demographic has changed. There is quite a lot of young people, and 43 per cent of what they share is science-based content. They will share pretty much anything that is interesting and there's not a whole lot of filtering to make sure what they are sharing is accurate and appropriate."*[12]
>
> — Nancy Claxton

.....

> *"The political and social drivers in all these emergencies and the emergency itself can be used to develop a narrative that is based on a small kernel of truth and then it can be twisted and twisted, and you can try to just peel away one lie but now it's part of a constellation and it's hard to disentangle."*
>
> — Tara Kirk Sell

A recent study investigated the differential diffusion of verified and false news stories on Twitter between 2006 and 2017. It demonstrated that "falsehood diffused significantly further, faster, deeper, and more broadly than the truth in all categories of information."[13] The study found that falsehoods penetrate further, faster and deeper because they have more shock value, and thus people are more likely to share false news and contribute to its virality.[14] The study also found that the truth takes about six times longer to reach people than falsehoods take.[15]

This study is evidenced by the recent example of the "Plandemic" conspiracy theory video, which accused US infectious-disease experts and Government officials of manufacturing the COVID-19 virus and sending it to China.[16] Given the video's shock value, it garnered more than 8 million views across social media platforms — mainly Facebook, YouTube and Vimeo — before it was taken down. [17]

12 Vraga et al. "Using Expert Sources to Correct Health Misinformation in Social Media." Science Communication 39, no. 5 (2017): 622.

13 Vosoughi, Soroush, Deb Roy, and Sinan Aral. "The Spread of True and False News Online." Science (American Association for the Advancement of Science) 359, no. 6380 (2018): 1146.

14, Ibid.

15 Ibid.

16 "Immunizing the public against misinformation." World Health Organization.

17 Ibid.

The "authority" figure in the video, Judy Mikovits, has a controversial record as a former research scientist who was fired from a leading research institute, arrested for theft and sued by her former employer. Despite this, millions of viewers across social media platforms watched the video. After becoming convinced that a sinister conspiracy involving elitists and Government officials was under way, they shared it with their followers.[18]

So, while concerns about MDH are not new per se, the role of social media in facilitating its spread raises an additional cause for concern to scholars, health experts and humanitarian practitioners.[19]

Prevention and Mitigation Measures Currently Being Taken by Humanitarian Organizations

Given the pervasiveness of MDH online, some humanitarian organizations have taken steps to monitor and counter misleading content that is likely to erode public trust and undermine their ability to fulfil humanitarian missions on the ground. WHO is at the forefront of this effort, working alongside several social media and tech companies to help limit the spread of MDH across the various platforms, as well as identify the most dominant topics with the potential to create harm and counter them with science-based health messaging in multiple languages.[20]

Through social-listening technology and artificial intelligence (AI), WHO analyses 1.6 million strands of information related to COVID-19 across social media platforms. It then codifies the information based on the following categories: cause, illness, interventions and treatment.[21] This process allows WHO to track which public health topics are provoking strong emotions or gaining traction and then develop tailored science-based health messaging in a timely manner.[22]

To reach people who lack access to social media, WHO has partnered with the United Nations Global Pulse initiative.[23] UN Global Pulse applies social-listening technology and AI to countries where radio is the primary source of information.[24] In Uganda, for example, most households rely on radio as their primary news source, and thousands of Ugandans call into local outlets to discuss topics, such as COVID-19.[25] The Uganda branch of UN Global Pulse employs social-listening technology powered by AI to translate the radio recordings into digital English text to identify which topics are gaining traction and then tailor an evidence-based response.[26]

18 Katie Shepherd. "Who is Judy Mikovits in 'Plandemic,' the coronavirus conspiracy video just banned from social media?" The Washington Post (May 2020), accessed August 2021, https://www.washingtonpost.com/nation/2020/05/08/plandemic-judy-mikovits-coronavirus/.

19 Vagra et al. "I Do Not Believe You: How Providing a Source Corrects Health Misperceptions Across Social Media Platforms." Information Communication & Society 21, no. 10 (2018): 1337.

20 "Immunizing the public against misinformation." World Health Organization.

21 Ibid.

22 Ibid.

23 Ibid.

24 Ibid.

25 Ibid.

26 Ibid.

For example, when UN Global Pulse found that local members of the community were promoting witchcraft and herbal treatments as COVID-19 cures, it was able to tailor its response to help "inoculate" the public with good information.[27]

Example 2: The Ebola Virus

Since the late summer of 2018, the remote Ebola outbreak in the Democratic Republic of the Congo (DRC) has expanded into an epidemic threat, which led WHO to declare it a Public Health Emergency of International Concern the following year. According to the Council on Foreign Relations, the Ebola epidemic has spread, in part, because of inadequate international support and the spread of misinformation and disinformation online and offline. The realities of the DRC context (armed conflict, political polarization and skepticism of foreign assistance) have proven fertile ground for the rapid spread of MDH related to the Ebola outbreak and international response. The accounts of MDH ranged from the Ebola vaccines being fake, to humanitarian responders stealing organs from the dead, to the disease being intended to eradicate those in the political opposition, to it being a money-making venture for a select few. The spread of MDH related to the Ebola outbreak and response culminated in over 400 violent attacks on humanitarian responders in DRC. Some interviewees recalled their experience working as responders:

> ***"When I was working on the Ebola crisis, there were many examples (of misinformation and undermining trust in the international humanitarian community). People thought that Ebola was to test war weapons on people of colour, and they would throw rocks at humanitarian responders."***
>
> — Anonymous

> ***"Ebola treatment centres were set up to treat people, and there was misinformation being spread online and offline that the treatment was going to kill them. Some treatment centres and health staff were attacked, and restoring the trust was really complicated."***
>
> — Anonymous

27 Ibid.

To further extend its coverage, WHO has formed alliances with local groups, such as journalists, local media outlets and faith-based organizations, that can help amplify and disseminate science-based health messaging, thereby combating the spread of MDH.[28]

More recently, WHO and UN Global Pulse joined forces with UNESCO and the UN specialized agency International Telecommunication Union to receive US$4.5 million from the Solidarity Response Fund. The funding is intended to scale the social listening initiative, add new capacity, such as a fact-checking centre, and convene an international "infodemiology" conference, in which experts gather to discuss evidence-based approaches to managing the COVID-19 infodemic.[29]

Independent of WHO, the UN community has undertaken additional initiatives to curb the spread of misinformation, including the 'Verified' initiative. Its purpose is to deliver daily UN-verified, evidence-based information to keep pandemic-affected communities safe and connected.[30] The initiative relies heavily on mobilizing millions of volunteers, otherwise known as 'digital first responders,' to fill information voids with verified, trusted information and counter misleading content.[31] The initiative's second phase is #PledgetoPause, which is built on the premise that by interrupting social media feeds and mindless scrolling, people will think more critically about the content they are consuming and sharing with their followers.[32]

Example 3: South Sudan

During the South Sudanese civil war from 2003 to 2020, refugees fled from major hotspots along the DRC and Uganda border to refugee and displaced persons camps.[33] At the camps, rumours and misinformation spread rapidly, fuelling suspicion and hostility among some of the South Sudanese tribes towards the humanitarian aid workers.[34] Multiple interviewees involved in the response recalled that South Sudan was a destitute place where many people lacked basic necessities to survive, including clean drinking water. So, for refugees to flee the camps or force humanitarian aid workers to evacuate attests not only to the impact of misinformation but also the erosion of trust in humanitarian organizations.

28 Ibid.

29 "Immunizing the public against misinformation." World Health Organization.

30 "'Verified' initiative aims to flood digital space with facts amid COVID-19 crisis." United Nations. (May 2020), accessed August 2021, https://www.un.org/en/coronavirus/'verified'-initiative-aims-flood-digital-space-facts-amid-covid-19-crisis.

31 Ibid.

32 "UN 'Pause' campaign has helped slow spread of life-threatening misinformation." United Nations. (May 2020), accessed August 2021, https://news.un.org/en/story/2021/07/1095222.

33 Christoper Tuckwood. "Reports from Rhino Camp: Baseline Survey Results on Refugees and Rumours." The Sentinel Project, September 2009, accessed August 2021, https://thesentinelproject.org/2019/09/09/reports-from-rhino-camp-refugees-and-rumours/.

34 Ibid.

Internews is also at the forefront of the effort to combat MDH in the humanitarian space. The international non-profit supports free and open Internet while seeking to educate citizens on media and data literacy.[35] With financial backing from the United States Agency for International Development (USAID), Internews developed a rumour-tracking methodology to address the Ebola outbreak in 2014.[36] The three-part manual, containing context, case studies and a how-to guide, provides a step-by-step methodology for understanding the local context, facilitating project planning, collecting rumours, analysing and responding to rumours, and sharing outputs within the humanitarian sector.[37] This manual has since proved useful in addressing the spread of misinformation amid humanitarian crises around the world. As per one Internews study on the information needs of migrants in Italy, affected populations are "more likely to act upon information exchanged via word of mouth through their networks than through formal channels or authorities." This preference infers that it's nearly impossible for humanitarian organizations to effectively respond to rumours that rely solely on formal systems of information dissemination.[38]

InterAction developed a Disinformation Toolkit as a resource for international non-governmental organizations (NGOs) that have become increasingly vulnerable to disinformation campaigns and targeted attacks.[39] The toolkit uses on-the-ground experience responding to disinformation attacks amid humanitarian crises. It outlines the conditions that create fertile ground for disinformation attacks, and provides practical tips for NGO leaders and communication and security experts to improve their preparedness.[40] The conditions include a lack of reliable and credible information, high levels of ambient fear, asymmetrical information environments, political events or power transitions, and past history of political and other leaders targeting civil society.[41]

To improve preparedness, the toolkit suggests that NGO leaders and security experts identify their risks, develop a risk mitigation plan, understand the media ecosystem, determine an appropriate immediate response, and work to build relationships and community resilience in the long term.[42]

Many other organizations have been actively working to develop methodologies to mitigate the spread of mis and disinformation. However, this report has focused on select case studies that illustrate how the humanitarian sector is working to address the COVID-19 infodemic. Some humanitarian organizations have made significant strides in mitigating the spread of MDH, but their efforts and progress have largely remained siloed.

35 "Internews." Internews. Accessed August 2021, https://internews.org.

36 "Managing Misinformation in a Humanitarian Context: Internews Rumour Tracking Methodology." Internews (2019), accessed August 2021, https://internews.org/resource/managing-misinformation-humanitarian-context/.

37 Ibid.

38 Ibid.

39 "InterAction: Disinformation Toolkit." InterAction, accessed August 2021, https://www.interaction.org/documents/disinformation-toolkit/.

40 Ibid.

41 Ibid.

42 Ibid.

> *"The problem that I see around mis and disinformation is that it has become a bit of a buzzword and everyone is creating their own fact-checking app or project, but it's in its own silo."*
>
> — Anonymous

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> *"Misinformation doesn't know boundaries, and for them [humanitarian organizations] to tackle it, they would need to work horizontally in coordination, and there are no agreements that will allow them to work that way."*
>
> — Anahi Ayala Iacucci

Many interviewees noted that the lack of coordination and collaboration among humanitarian organizations has not been the only impediment to implementing effective mitigation measures. Additional considerations include the limitations of humanitarian organizations' application of new and emerging technologies as well as their overarching and competing strategies.

> *"I am skeptical of software that claims to detect mis and disinformation. My team does use mixed methods, including web scraping and some automated methods, but the most effective way is having some automated technologies, but in the hands of domain experts with ethnographic expertise."*
>
> — Gabby Lim

The limitations of new and emerging technologies include cost, installation, accessibility and coverage. As a result, many humanitarian organizations have not been able to integrate them into their work, or they have done so with limited success because they are expensive, difficult to install, and lack accessibility and coverage in terms of Application Programming Interface (API) and language barriers. Absent these barriers, humanitarian organizations still have to consider what percentage of the workload will be replaced by automation and what percentage will remain reliant on human capacity. If there is no significant reduction through automation, integrating such technologies will not be a resource-efficient solution.

We like to think technology will help solve problems, but multiple interviewees stressed that humanitarian organizations are often trying to treat the symptom of mis and disinformation rather than the root problem: the erosion of trust in Government and public institutions.

> *"My fear is that humanitarian organizations are very much still looking at the symptom [of misinformation] and not addressing the root cause. I would like to see organizations discuss how they are accountable to beneficiaries, responsible to them, and create an equal relationship."*
>
> — Anahi Ayala Iacucci

> *"I have limited faith in the long-term effect of counter messaging alone because people are often looking to reinforce their beliefs, not always the truth… we need to invest in how we can better work with Governments, the private sector, and academia to understand the real causes, develop a comprehensive analysis of how, why and when those phenomena play out, how they impact people on the ground so that appropriate measures are taken."*
>
> — Anonymous

While humanitarian organizations can adopt many tactical and strategic practices, they must recognize that rigid practices will have limited effectiveness as humanitarian emergencies constantly evolve, and thus the MDH narratives also continue to morph. Flexibility and rapid adjustments will be key.

How To Improve Prevention & Mitigation Measures

Humanitarian organizations have recognized the red flags of MDH, yet they still have not directed enough analysis and resources to implementing prevention and mitigation measures. Drawing on interviewees' experiences and existing empirical research, there are several ways in which humanitarian organizations can move forward.

Communication Strategies

To start, humanitarian organizations must develop expertise in analysing and reacting quickly to unverified information flowing in from different pathways at the onset of disasters and emergencies. According to several interviewees, a reasonable degree of uncertainty is inevitable when dealing with information inflows at the onset of a disaster or emergency, but this uncertainty should not prevent humanitarian organizations from communicating with affected populations and moving forward with their relief efforts.[43] It is critical for humanitarian organizations to conduct a rapid assessment of unverified information and have processes in place to categorize and communicate such information **in the language of the affected populations**.[44]

> *"Misinformation and disinformation thrive in gaps and vacuums. Humanitarian organizations' primary tactic should be to provide truthful information as soon as it is available and to have mechanisms to communicate uncertainty, and additionally to provide information that is customized to different publics in different ways."*
>
> — Carlos Castillo

One interviewee suggested that humanitarian organizations implement a classification system similar to that of the International Agency for Research on Cancer's classification of carcinogenic hazards: carcinogenic, probably carcinogenic, possibly carcinogenic, not classifiable as carcinogenic, and probably not carcinogenic.[45]

43 Carlos Castillo. Big crisis data: social media in disasters and time-critical situations. Cambridge University Press, 2016.

44 Ibid.

45 Castillo. Big crisis data: social media in disasters and time-critical situations; International Agency for Research on Cancer (IARC). "IARC Monographs on the Identification of Carcinogenic Hazards to Humans." World Health Organization, accessed August 2021, https://monographs.iarc.who.int/agents-classified-by-the-iarc/.

Example 4: Syria & the White Helmets

In December 2018, a disinformation campaign targeted a Syrian civil defense group commonly known as the White Helmets. They were the first responders to several chemical attacks and sought to rescue the tens of thousands of civilians trapped in the rubble from air strikes.[46] The disinformation campaign circulated charges that the White Helmets were transporting chemical weapons to a rebel-occupied northern province in preparation for attacks on Syrian soil.[47] The campaign aimed to paint the White Helmets as "terrorists" and thus justifiable targets of the Syrian State security forces.[48] The humanitarian consequences were profound, with over 250 White Helmets volunteers killed and many more fearing for their lives.[49]

Such a system would allow humanitarian organizations to be the first to disseminate vital and often life-saving information, while increasing transparency, communication and trust with affected populations. As evidenced in one study, "social media users strongly prefer an immediate message about an earthquake with a provisional estimate of its magnitude (marked "provisional estimate"), instead of a message ten to twenty minutes later, once the magnitude has been confirmed."[50]

Social media information is subject to "information expiration," which means that if humanitarian organizations wait until the information is validated it may no longer be valid or relevant by the time of publication.[51] Therefore, the timing and transparency of humanitarian information at the onset of a disaster or emergency are critical to an effective response.

Humanitarian organizations tend to be bureaucratic in nature and have outdated communication and behaviour-change strategies. Even basic decisions such as how and where they communicate and who communicates get caught up in rules and regulations. To be rapid in their communication efforts, organizations need to find a way to be more flexible.

46 Ibid.
47 Ibid.
48 Ibid.
49 Ibid.
50 Castillo. Big crisis data: social media in disasters and time-critical situations.
51 Ibid.

> *"In the humanitarian space, there are so many regulations that allow for only a few select people to speak on behalf of the organization. There is only one channel, so there is limited space for people who have accurate information to get it out to a wider audience."*
>
> — Nancy Claxton

By leveraging only a few preferred communication channels, humanitarian organizations have difficulty preventing information voids. Such voids lead to the rapid spread of MDH and the subsequent erosion of trust in public institutions. To prevent information voids, humanitarian organizations must increase their communication channels and engagement with affected populations. Such efforts would improve the humanitarian sector's credibility and help counter any MDH that arises..

Example 5: Public Health Workers in the US During the COVID-19 Pandemic

In February 2020, US Government officials levelled accusations against an authoritarian regime for creating thousands of troll accounts across social media platforms — mainly Facebook, Twitter, Instagram and TikTok — to promote fake news and conspiracy theories surrounding the outbreak of COVID-19.[52] One of the most prevalent theories was that the US manufactured COVID-19 as a bioweapon to impede China's economic growth and development.[53] Variations of this theory were propagated by over 80 disinformation campaigns in countries worldwide in an attempt to aggravate the public health crises in Western countries and undermine trust in national democratic institutions and health-care systems.[54] The impact is illustrated in the perpetuation and persistence of COVID-19 infections; mistrust in Government and public health officials; direct violence against the Government and public health officials; and the exacerbation of political movements such as the anti-vaccination, anti-immigration and anti-Government movements.[55]

52 Rose Bernard et al. "Disinformation and Epidemics: Anticipating the Next Phase of Biowarfare," Health Security, Vol. 19, No. 1 (2021), 4.

53 Ibid.

54 Ibid.

55 Ibid.

Cross-Sector Coordination and Standardization

To address the challenges arising from the spread of MDH, humanitarian organizations must establish partnerships across the sector and civil society. MDH is a complex problem that involves various actors. For the sector to effectively combat this problem, organizations must pivot away from working on solutions in siloes to a sector-wide, systemic approach that provides frameworks for mandatory staff training, as well as detecting, monitoring and responding to mis and disinformation online.

The interviewees agreed that there must be increased coordination and collaboration among humanitarian organizations and civil society. However, there was a wide array of opinions on establishing a sector-wide, systemic approach. Some insisted that there should be formal training on digital literacy, digital safety and community engagement in order to more efficiently identify, categorize and address mis and disinformation.

> *"Staff at humanitarian organizations should have training on how to recognize and counter misinformation. Sometimes I'll go into the field and too frequently see staff counter misinformation in such a disrespectful way that the beneficiaries hang onto their beliefs even more tightly. Staff have to be respectful and approachable."*
>
> — Nancy Claxton

Some interviewees held that there should be a set of standardized protocols and policies put in place to address mis and disinformation, such as designated risks, communications teams, cultural norms assessments, a database of common vulnerabilities, tactics, refutations and so forth.

> *"I think [establishing a standardized process for identifying and categorizing misinformation] would be really helpful. What were the strategies, what platforms were used, what were the wedge issues, and what were the outcomes? This would allow for comparable data and make the problem more tractable…If there was formal training for staff who work in these fields—like a database of common vulnerabilities and tactics and training on crisis communications—that would be really important to help identify mis and disinformation before it happens. Also, good cyber hygiene and safety courses for anyone who has to do anything online."*
>
> — Gabby Lim

Other interviewees cautioned that standardized processes would make it increasingly difficult for humanitarian organizations to adapt to the changing nature across contexts and countries. For example, there are clear similarities but also significant differences between the 2014 Ebola outbreak and the 2020 COVID-19 outbreak. Those differences demonstrate the limited effectiveness of a one-size-fits-all approach to MDH. So, standardized processes would be useful when they are provided as a general road map and then customized to local contexts.

Information Ecosystem Assessment

As part of the cultural norms assessment, humanitarian organizations must conduct an information ecosystem and/or needs assessment to better understand which channels and sources of information are most trusted among affected communities.[56] Organizations including the United Nations High Commissioner for Refugees, Internews and InterAction have established frameworks for conducting such assessments, but they have not been fully integrated at the operational level.

According to the Internews Rumour Tracking Guide, humanitarian organizations can conduct an in-depth information ecosystem assessment through group discussions and interviews to learn how information is generated and spread within an affected community.[57] Humanitarian organizations can also conduct an information needs assessment (INA) through short surveys to assess the affected populations' understanding of a humanitarian crisis, what information they would like to receive and how they would like to receive it.

Ideally, humanitarian organizations would combine both the qualitative and quantitative research methods to achieve an in-depth understanding of the information ecosystem. However, in time-sensitive situations, such as a rapid-onset emergency, organizations may choose to conduct only an INA in order to help formulate an appropriate communications strategy.[58]

56 "Innovations to transform humanitarian aid in the wake of the COVID-19 pandemic." Creating Hope in Conflict: The Humanitarian Grand Challenge. (January 2021), accessed August 2021, https://humanitariangrandchallenge.org/innovations-to-transform-humanitarian-aid-in-the-wake-of-the-covid-19-pandemic/.

57 "Managing Misinformation in a Humanitarian Context: Internews Rumour Tracking Methodology." Internews.

58 Ibid.

Example 6: Gaza

In May 2021, violence resumed in the ongoing Israeli-Palestinian conflict.[59] The violence significantly escalated when Israel launched military strikes on the Gaza strip, killing more than 200 Palestinians and displacing many Palestinian families.[60] Following these strikes, remarks from the United Nations Relief and Works Agency for Palestine Refugees (UNRWA) appeared to praise Israel's military action, claiming on Israeli national television that the strikes were carried out with "precision" and "sophistication," despite many civilian casualties.[61] The remarks sparked outrage among Hamas, who claimed military precision and sophistication were no justification for war and civilian deaths.[62] UNRWA issued an apology, claiming that its statement was taken out of context and manipulated to favour Israel and infer that it operated within the confines of the laws of war. UNRWA went on to say that "military precision and sophistication are never a justification for war." [63]

The apology was not enough to quell the outrage; attacks against senior management at UNRWA in the Gaza strip continued, including a "very large protest" in front of the UNRWA field office in the Gaza strip.[64] In response to the attacks, two senior officials were recalled to UNRWA's headquarters in East Jerusalem, while other UNRWA staff at the field office in the Gaza strip remained on high alert.[65]

These examples of how MDH campaigns undermine trust in humanitarian organizations and their ability to respond effectively attest to the fact that the humanitarian sector is already highly susceptible. Much more work is required to prevent the spread of MDH, mitigate its potential harms, and ensure the safety and well-being of humanitarian staff and beneficiaries.

59 "Timeline: Israel-Hamas Fighting Has Taken a Dire Toll." NPR, May 2021, accessed July 2021, https://www.npr.org/2021/05/19/997989474/timeline-israel-hamas-fighting-takes-a-dire-toll-with-no-end-in-sight.

60 Ibid.

61 "Palestinian groups slam UNRWA's director's comments on Gaza attacks." Aljazeera, May 2021, accessed July 2021, https://www.aljazeera.com/news/2021/5/25/un-gaza-official-comments-slammed-by-palestinians-as-dangerous.

62 "UNRWA director in Gaza apologizes after saying IDF strikes were "precise." Jerusalem Post, May 2021, accessed July 2021, https://www.jpost.com/arab-israeli-conflict/gazans-outraged-after-unrwa-director-says-idf-strikes-were-precise-669090.

63 "Palestinian groups slam UNRWA's director's comments on Gaza attacks." Aljazeera.

64 "UNRWA commissioner-general statement on staff safety in Gaza." ReliefWeb, June 2021, accessed July 2021, https://reliefweb.int/report/occupied-palestinian-territory/unrwa-commissioner-general-statement-staff-safety-gaza.

65 "UN agency withdraws director from Gaza after threats." AP, June 2021, accessed July 2021, https://apnews.com/article/united-nations-middle-east-b03eb29c5b9286fff1d6b80cf6539294.

Social Media Engagement

Once humanitarian organizations have developed an understanding of an affected community's specific needs and primary channels of media consumption, they can develop effective communication and behaviour-change strategies. There are several elements of such strategies:

1. Humanitarian organizations must avoid repeating or sharing any MDH as they attempt to debunk it. Mistakenly sharing such information will only concretize it in people's minds.[66]
2. Fact-checkers must flag rather than censor MDH. Any strategies related to censorship or shutting down spaces for people who promote conspiracies are likely to backfire and further erode public trust. However, there may be exceptions, especially when it comes to people's safety.
3. Fact-checkers need to use the affected community's language when responding to MDH, with a correction and at least one reputable source. Doing so enables everyday users to read and share the corrected information. It has been shown that these everyday users can correct one another's misperceptions on social media platforms by commenting and attaching a single reputable source.[67] Such action results in observational correction, where observers update their own attitudes and beliefs after witnessing another user being corrected.[68] It becomes a compounding effect.
4. Humanitarian organizations need staff whose mandate is to both refute MDH online with evidence and mobilize the community to gain a broader reach.[69]

Community Engagement

In addition to working with digital volunteers, humanitarian organizations need to work with local actors and groups, such as youths, journalists and faith-based organizations, to build communities resilient to MDH. Working with these groups will help organizations co-develop communication strategies that are tailored to each cultural context. Humanitarians can help build resiliency by ensuring that local actors receive training in digital literacy related to identifying and responding to MDH:

66 "Repeating Misinformation Doesn't Make It True, But Does Make It More Likely to Be Believed." Association for Psychological Science. (September 2020), accessed August 2021, https://www.psychologicalscience.org/news/repeating-misinformation-doesnt-make-it-true-but-does-make-it-more-likely-to-be-believed.html.

67 Vraga, Emily K, and Leticia Bode. "Using Expert Sources to Correct Health Misinformation in Social Media." Science Communication 39, no. 5 (2017): 636.

68 Ibid.

69 Ibid.

> *"Social listening technologies are important, but they don't have the decision-making requirements that having people on the ground allow for. [Humanitarian organizations should] try to set up tools and processes that allow people to be resilient to misinformation and disinformation so that when they are hit with it, they understand the tactics being used against them and they know where to go to see if it's true or false. And they should try to get all the stakeholders involved."*
>
> — Tara Kirk Sell

Working with local actors and existing structures on the ground, responders can more quickly disseminate vital, often life-saving information to the affected community. Plus, when this information comes from a familiar and trusted source, it is more likely to resonate with the affected community.

> *"At the individual and ground levels, you may find that beneficiaries don't completely trust information coming from some humanitarian organizations. They may trust at the interpersonal level one community member that is working with the organization, so they will listen to that information, although they may have kernels of doubt."*
>
> — Nancy Claxton

Humanitarian organizations that leverage local actors to help "vaccinate" 30 per cent of affected communities with verified information achieve a certain degree of "herd immunity." Even at that percentage, it can prevent MDH campaigns from taking hold and implicating future humanitarian relief efforts on the ground.

Additional Considerations & Conclusion

Humanitarian Organizations as Likely Targets

It is concerning that some humanitarian organizations have not yet recognized MDH as an existential threat to the safety and security of responders and beneficiaries. This non-recognition combined with the bureaucracy of many humanitarian organizations and the prevalent donor model that disincentivizes cross-sector collaboration caused many interviewees to express distress over the sector's future. Past campaigns and the current context of the COVID-19 pandemic should make it apparent that coordinated disinformation campaigns targeting the international humanitarian community are likely to only become more frequent and destructive over time

In today's digital age, anyone can become an agent of MDH, and any humanitarian organization can easily become a direct target. Rapid digitization, combined with an erosion of trust in public institutions, has created fertile ground for MDH campaigns to gain traction. For humanitarian organizations that are directly targeted, the risk of harassment and offline violence is high, resulting in their impeded ability to fulfil response objectives. In the end, the affected community suffers even more.

> *"[Misinformation and disinformation are] incredibly damaging to humanitarian organizations' ability to fulfil their mission and response. Trust is critical and the thing that misinformation and disinformation hurts the most is trust; if they don't have trust, they don't have compliance."*
>
> — Nancy Claxton

To mitigate the risks posed by the spread of MDH, the humanitarian sector must fundamentally rethink its approach. Given the breadth and complexity of the problem, traditional humanitarian organizations, such as UNOCHA, must pivot away from developing solutions in siloes to a sector-wide approach. Such organizations must join forces to develop effective communication strategies, design standardized processes for dealing with MDH, conduct information ecosystem and needs assessments, share social media corrections and, most importantly, engage with the community.

With the right strategies and processes in place, the sector can help to prevent and mitigate the spread of MDH. Doing so will help reduce the potential harm to responders and aid beneficiaries alike.

Additional Resources Provided by Interviewees:

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WHO Pages and Publications

https://www.who.int/health-topics/infodemic#tab=tab_1

https://www.who.int/publications/i/item/9789240010314

https://www.who.int/teams/risk-communication/infodemic-management/1st-who-training-in-infodemic-management

https://www.who.int/publications/i/item/9789240019508

https://www.who.int/campaigns/connecting-the-world-to-combat-coronavirus/how-to-report-misinformation-online

https://us18.campaign-archive.com/home/?u=74c4caeab23ab5c61c17e22a7&id=995f9a6165

https://www.euro.who.int/__data/assets/pdf_file/0005/315761/Vocal-vaccine-deniers-guidance-document.pdf

How to Respond to Vaccine Misinformation Online

https://www.who.int/risk-communication/introduction-to-risk-communication.pdf

https://www.who.int/publications/i/item/risk-communication-and-community-engagement-(rcce)-action-plan-guidance

https://mediamanipulation.org/research/mitigating-medical-misinformation-whole-society-approach-countering-spam-scams-and-hoaxes

Partner and Other Publications

https://vaccinemisinformation.guide

https://www.unicef.org/eca/media/13636/file

https://internews.org/resource/managing-misinformation-humanitarian-context/

https://internews.org/wp-content/uploads/2021/04/COVIDReport_20210416.pdf

https://www.climatechangecommunication.org/debunking-handbook-2020/

https://en.unesco.org/covid19/disinfodemic

https://blogs.icrc.org/law-and-policy/2021/01/15/misinformation-humanitarian/

https://blogs.icrc.org/law-and-policy/2019/06/12/digital-risks-populations-armed-conflict-five-key-gaps-humanitarian-sector/

Academic Publications

http://bigcrisisdata.org/chapters/Big_Crisis_Data-Carlos_Castillo-Chapter_8-Free_preview.pdf

https://www.liebertpub.com/toc/hs/19/1

https://journals.sagepub.com/page/bds/collections/studyinginfodemicatscale

https://www.nature.com/articles/s41567-020-01039-5

https://www.jmir.org/2020/6/e21820/

https://www.who.int/docs/default-source/epi-win/presentations-of-all-speeches/webinar-11-lb-gu-7-april-2020.pdf?sfvrsn=245533d3_2

https://doi.org/10.1016/j.cognition.2018.06.011.

https://doi.org/10.1126/science.aap9559.

Frameworks/Other

http://ancient-castle-77376.herokuapp.com

https://github.com/cogsec-collaborative/AMITT/tree/main/AMITT_MASTER_DATA

https://www.slideshare.net/bodacea/2021-iwc-presentation-risk-socs-and-mitigations-cognitive-security-is-coming-of-age

https://fullfact.org/about/policy/consultations/incidentframework/


DH Network
Digital Humanitarian Network