

The focus

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World Health Organisation (WHO)
COMPETENCY FRAMEWORK FOR INFODEMIC MANAGEMENT (IM)

## Infodemic



An infodemic is too much information including false or misleading information in digital and physical environments during a disease outbreak. It causes confusion and risk-taking behaviours that can harm health. It also leads to mistrust in health authorities and undermines the public health response. An infodemic can intensify or lengthen outbreaks when people are unsure about what they need to do to protect their health and the health of people around them. With growing digitization – an expansion of social media and internet use – information can spread more rapidly. This can help to more quickly fill information voids but can also amplify harmful messages.

## **Terminological clarification**

**MISINFORMATION**: "Information that is false, but the person who is disseminating it believes that it is true"

**DISINFORMATION**: "Information that is false, and the person who is disseminating it knows it is false"

**MAL-INFORMATION**: "Information that is based on reality, but used to inflict harm on a person, organization or country"

(Wardle 2020)

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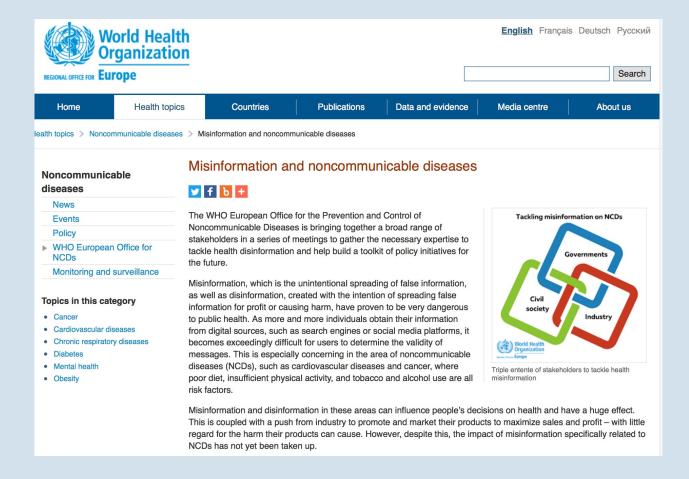
During the COVID-19 pandemic, people have been exposed to a great deal of information: news, public health guidance, fact sheets, infographics, research, opinions, rumors, myths, falsehoods, and more. The World Health Organization and the United Nations have characterized this unprecedented spread of information as an "infodemic."

Although health misinformation is not a recent phenomenon, in recent years it has spread at unprecedented speed and scale, especially online. But, together, we have the power to build a healthier information environment where we make more informed decisions about our health and the health of our loved ones and communities.

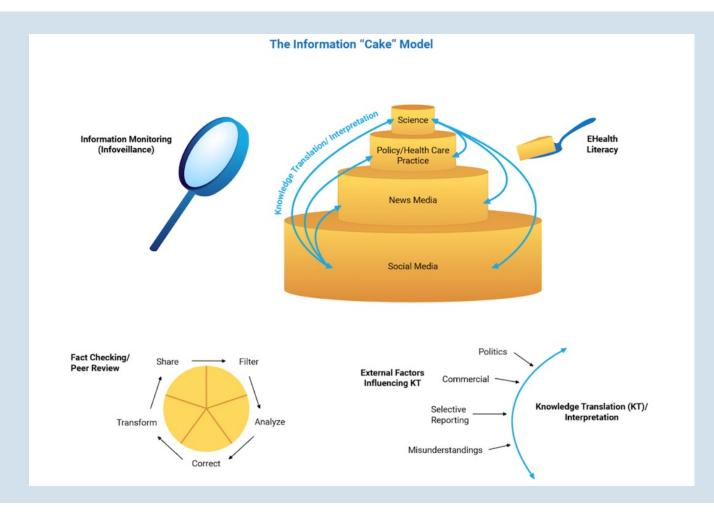
Preventing and addressing health misinformation is a major priority for the Surgeon General. In a new Surgeon General's Advisory, available below, the Surgeon General is warning the American public about the urgent threat of health misinformation and calling for a whole-of-society approach to address health misinformation during the COVID-19 pandemic and beyond.

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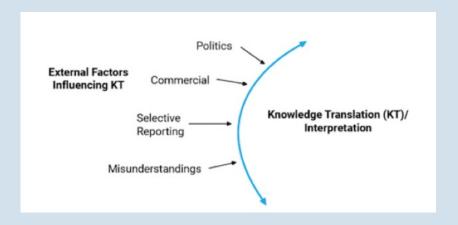
Eysenbach G How to Fight an Infodemic: The Four Pillars of Infodemic Management J Med Internet Res 2020;22(6):e21820



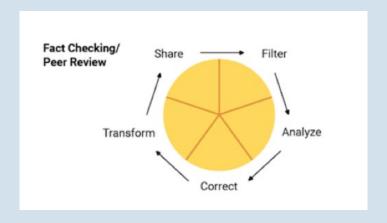
## First pillar: Accurate knowledge translation



- WHO: "knowledge should be translated into actionable behaviour-change messages presented in ways that are understood by and accessible to all individuals"
- "But KT is subject to political, commercial, or other influences that distort the scientific message, the influencing factors should be minimized or, if present, at least clearly disclosed and called out"



- Knowledge Refinement, Filtering, and Fact-Checking
- Clearly labelling the provenance of the information at the different knowledge production stages
  - For example, in the science layer: unreviewed preprints, peer-reviewed scholarly communications...



## Third pillar: eHealth and science literacy



- The user carries a significant part of the responsibility to select and evaluate health information.
- "For example, nothing stops a user from tapping into the vast array of unreviewed preprints published in preprint servers such as medRxiv..."



## Third pillar: eHealth and science literacy







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#### THE PREPRINT SERVER FOR HEALTH SCIENCES

	A displayed Seems	
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Caution: Preprints are preliminary reports of work that have not been certified by peer review. They should not be relied on to guide clinical practice or health-related behavior and should not be reported in news media as established information.

## Fourth pillar: Infoveillance

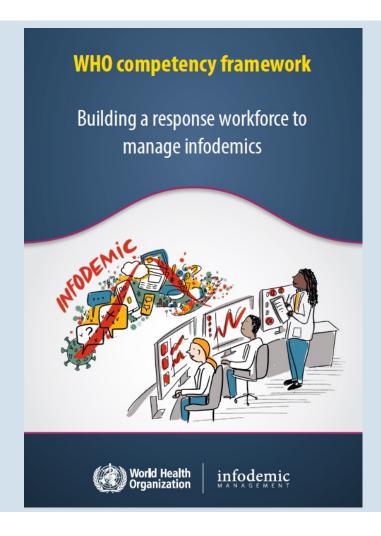
"Infoveillance requires generating metrics on information supply on the internet, including its quality (for example incidence of anti-vaccination tweets), as well as information demand metrics, such as search queries or questions posed on social media or other web 2.0 platforms"



## Some history



- On February 15, 2020, the WHO director-general, Tedros Adhanom Ghebreyesus,
   warned the world of the threat of an infodemic accompanying the pandemic
- In April 2021, United Nations Communications Response Initiative to combat the spread of mis- and disinformation
- May 11, 2020, Guidance note on addressing and countering covid-19 related hate speech
- Between June and October of 2020, the WHO Information Network for Epidemics (EPI-WIN): global online technical conference to develop a public health research agenda for infodemic management
- 21<sup>st</sup> September 2021 WHO, in partnership with the US Centers for Disease Control and Prevention (US CDC) published the competency framework



## What is a competency framework?



- A guide to orient and support the design, development and the evaluation of the needs of institutional workforce (i.e. IM workforce)
- It contains, under certain domains:
  - Activities: core functions of work, which encompass groups of related tasks (e.g. identify individuals' needs)
  - Tasks: observable component units of work within an activity (e.g. identify people's topics of interest)
  - Knowledge: the informational basis needed to perform a certain task (e.g. quantitative research methods)
  - Skills: A specific ability that is learned through practice (e.g. utilize social listening research methods)

## **Background research**

- A qualitative study with key participants
- Specifically, participants (n = 26), (n = 10, academics) and (n = 16, professionals in the field).
- Countries: Africa (n = 3), Belgium (n = 1), Canada (n = 2), China (n = 1), Finland (n = 1), Italy (n = 2), Malta (n = 1), Pakistan (n = 1), Sweden (n = 1), Switzerland (n = 1), Thailand (n = 1), UK (n = 3) and US (n = 8).
- Backgrounds: informatics, health behavior change, health communication, health economics, health education, health literacy, health policy, public health, scientific journalism, and social media.

## Important dimensions of IM (results from expert-interviews)

## 1) Institutional capacity

"Institutional capacity requires findings human resources and having, among other things, legal framework. Here governments have to partner and show awareness of the importance of IM"

## 2) Ongoing education

"Let the public know when relevant new information about the pandemic becomes available and explain how new information may change pandemic guidelines"

## 3) Targeting communication

"We must consider what form of communication people need (written, audio, visual and so forth). We have to decide the best speak for a certain message: a press officer, a good narrative person, and expert in scientific findings. We need influencers, but it also important to have as testimonial normal people"

## Important dimensions of IM (results from expert-interviews)

## 4) Marginalized people

"Building relationships with marginalized people is essential. Everybody suddenly is important!"

## 5) High vs low quality information

"Freedom of speech for sure, but it should also have limitations. You can have it until it does not harm. There are many legal aspects linked to the control of information. From monitoring to action is not easy. What do you do? Do you block the account of people? This is not feasible in a complex system..."

## 6) Partnership

"There is no such a person who can have all of the skills"

## **Key concepts**



#### **SURVEILLANCE - LISTENING**

**VIRUS - NARRATIVE** 

**DISEASE - DISTRUST** 

**INTERVENTIONS** 



## At the core of the framework

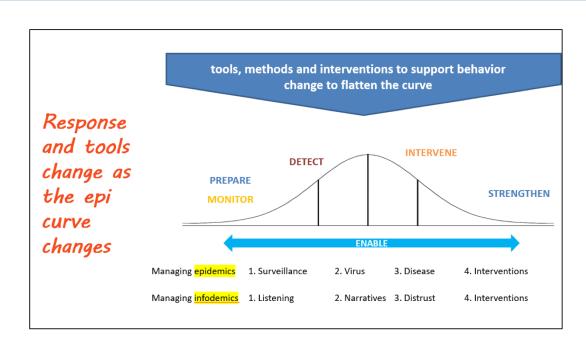


Figure 1. The five workstreams in the epi curve of an infodemic response, analogous to the epidemic response.

## LISTEN

## Goal 1. Infodemic managers listen to target audiences and identify individuals' information gaps and needs, and behaviors

- IM requires:
  - skills to utilize research methods, social listening and social media monitoring tools to collect, analyse and evaluate (online and offline) data
  - skills to identify targets for IM interventions for behaviour change within an ecological behavioural perspective

Goal 2. Infodemic managers share accurate and appropriate information with target audiences to increase awareness, promote health literacy and strengthen behaviour

#### IM requires:

- skills to use theoretical insights and research findings to tailor, pre-test and deliver health communication messages
- skills to maintain, promote and build trust in health institutions
- skills to engage with the media and to empower spokespersons to speak on behalf of institutions

Goal 3. Infodemic managers design, implement and evaluate interventions to promote resilience to misinformation.

#### IM requires:

- skills in social marketing and health campaigns
- skills to design public health multilevel interventions
- skills to evaluate interventions

## Goal 4. Infodemic managers build resilience to mis/disinformation

#### IM requires:

- skills to develop and utilize standard operating procedures to collect, analyse and correct misinformation on various levels
- skills to build and strengthen coordinated work with partner organizations and stakeholders to act on mis/disinformation in a timely way

## **STRENGHTEN**

## Goal 5 (overarching). IM strengthen institutions' capacity

#### IM requires:

- skills to build IM capacity within institutions
- skills to promote and to facilitate implementation of IM within institutions

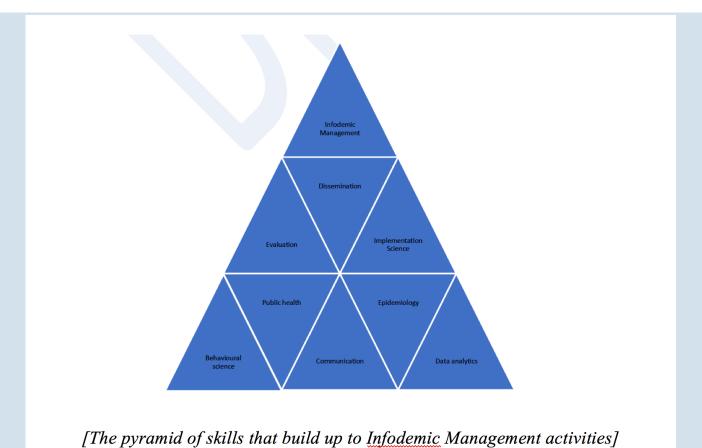


Image drafted by Jennifer Cole

## **Disinformation spreads quickly:**

Few dissenters in the scientific community who are "louder" than the silent majority

Widespread scientific illiteracy

Presenting **opposing views as having the same value**, as they were equal (e.g. giving them the same public space, the same coverage) although one is the view of the scientific community and the other is the view of a few dissenters

"misinformators" are better communicators (or manipulators...)

**Some news receive way larger coverage** than others and therefore stay in the public memories (e.g. fraudulent study on MMR vaccine and autism were more discussed in the media than the fact that the authors had to retract their study)

## Critical thinking and trust are key

#### Reestablish trust in the institutions, in facts and in rational discourse

→ When people trust, they follow the recommendations

**Promote critical (media) literacy** (= skeptical disposition and a critical attitude toward information, its production and distribution)

→ Enhances resilience to disinformation (using critical thinking instead of intuition)

(Lewandosky & Cook 2020; Craft et al. 2017)

## **Recent publications**





## 1. Build trust and credibility

If people see you as a trusted and credible source, they'll listen to you and possibly apply your recommendations

But you do not build trust and credibility overnight...

→ **How to**: Through routine communication in normal times and constant updates during the crisis

→ Why: People have to think that when it comes to health, you are the expert and they can rely on you + seeing you regularly

## 2. "Listen to" people

To know what **topics** are trendy, which stories (including conspiracy theories) are circulating, what are people's **concerns** 

To understand what are the **reasons behind** (beliefs, emotions, ...) inappropriate behaviors and adopt the best strategy to change them

Is risk perception low because people are tired of restrictions or is it low because people in a certain region haven't seen the consequences of covid-19?

→ How to: monitor social media platforms

## 3. Talk to people – Normal times

Do not limit communication to public health emergency → Structure a routine communication

#### $\rightarrow$ How to:

- Address topics that are of interest for your audience and in which you have expertise
- Differentiate types of content (e.g. more entertaining; knowledge dissemination; of general interest vs for specific patient groups)
- Have different channels to reach out to people (e.g. social media, newsletters, journals)

## Talk to people – Example Mayo Clinic



Video – Topic of general interest, entertaining (nutrition)



Written post – Topic of general interest, presenting the staff



Written post – Topic of general interest, knowldge dissemination (mental health)



Written post – Topic of interest for specific group



Interview – Technology implementation at Mayo Clinic

## 4. Talk to people – During the crisis

#### $\rightarrow$ How to:

Choose a high-credibility source (→ more persuasive)

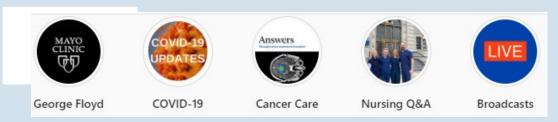
Create a link with your audience (i.e. avoid shaming, be empathetic)

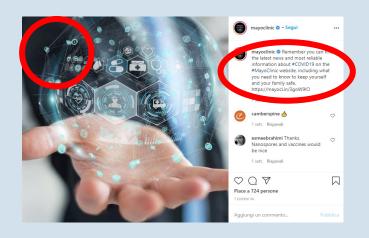
Don't keep secrets and acknowledge uncertainty or current problems

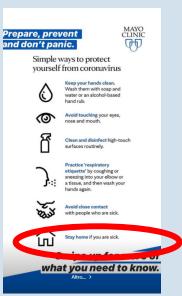
Repeat the main message (e.g. which precautions they can take) and provide regular updates, using different formats through different channels

 e.g. WHO weekly media briefing on Facebook and WHO posts on Instagram to remind the recommendations and correct misinformation

## Talk to people – During the crisis







## 5. Build a social media network

Many institutions are perceived as far away from the public and when they "appear" in the public discourse during a crisis, they have only few followers = they reach out to few people

→How to: Establish stable collaborations with opinion leaders and influencers (e.g. soccer players, singers, YouTubers, TV moderators) who endorse your messages

→ Why: It will be easier to reach out to different audiences in case of a public health emergency (but also of a health promotion campaign…)

## 6. Educate

#### $\rightarrow$ How to:

- Provide consumers with guidelines for fact checking
- Inform about accreditation systems which have transparent criteria
- Direct people to fact-checking websites (e.g. factcheck.org; FirstDraftNews.com, Snopes.com)
- Direct people to "whitelists" of news sources
- Suggest the use of a browser extension that provides a green—red signal to indicate whether a website adheres to basic standards of credibility and transparency (e.g. NewsGuard)

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## 7. Invest in pre-bunking

Inoculation or prebunking = a "vaccination" against misinformation

If people are told that they might be misled and are made aware of the fallacies in conspiracy theories, they may become less vulnerable to such theories

→ **How to**: campaigns to raise awareness about misinformation and promote virtuous behavior

(Lewandosky & Cook 2020)





https://doi.org/10.1093/heapro/daab197

Action through governmental and policy action (health literacy on the public and policy levels to initiate change and supportive environments)	Intended social vaccine effects in society (health literacy on the population and individual levels)
A. Direct health communication measures to increase and strengthen health literacy	
Guide people to find trustworthy, objective information providers, and enable them to be gate keepers and communicators of reliable health information	Directing people to reliable sources helps them to become knowledgeable and skilful in order to provide reliable health information within their social environment
Provision of information based on new and emerging evidence on a continuous basis	Keeping people informed and preparing them for the fact that interventions are recommendations might change based on new evidence
Provide information based on health literacy principles	People having information that is easy-to-access, easy-to-understand, easy-to-use, barrier-free and borderless, and messages of relevance to various groups and individuals-content-, language- and form-wise
Provide information guidelines on how to identify misinformation and fake news, including awareness to always check the source of information on various social and media channels	Critical information users able to identify misinformation and judge about information and source quality (is the source trustworthy, what is its origin, wh is it about, who is the author, what is the intention, why was it shared, when wait published)
Encourage a balanced exposure to information in the media and in relation to other important activities during emergency situations	Preventing information overload and supporting individuals, families and communities in achieving a sense of wellbeing
Raise citizen (health) consciousness about causes of unhealthy behaviour and conditions and provide measures to overcome those	Enhancing citizens that are aware of their health situation and that of others as well as satisfied and feeling a sense of solidarity as the governments protects a supports all equitably

## **Enhancing IM practice**

- Developing/reviewing terms of reference and job descriptions
- Redesigning work processes
- Reorganizing responsibilities
- Linking work functions to required competencies
- Conducting training needs assessments and developing training plans
- Developing indicators to evaluate institutional (and staff) performance in IM

## The case of med-influencers



## The case of med-influencers

**HEALTH AND SCIENCE** 

# Global experts go head-to-head over claims the coronavirus 'no longer exists clinically'

Holly Ellyatt
@HOLLYELLYATT

#### KEY POINTS

- Dr Alberto Zangrillo, the head of intensive care at the San Raffaele hospital in Milan in Lombardy (the epicenter of Italy's coronavirus outbreak), caused a stir on Sunday by telling Italian media that a study by his colleague had shown that the virus was losing its potency.
- Zangrillo, who is well-known for being the personal doctor of Italy's former President Silvio Berlusconi.
- WHO said the coronavirus is still a "killer virus"



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## Institutional questions/ Questions for institutions...

## Mis/Disinformation from health professionals?

- Is the health professional aware of spreading low-quality information?
- Individual opinions versus evidence based findings. What is the link between health professionals freedom of speech and evidence-based information?
- Health professionals employed in institutions and organization: a code of communication to verify the quality of their divulgation?
- ... and what should mass-media do?

## **Current work**



Developing standards for institutional health communication during public health emergencies. Learning from information around COVID-19 pandemic as a case in point.

**English title** Developing standards for institutional health communication during public health emergencies. Learning from information around

COVID-19 pandemic as a case in point.

**Applicant** Rubinelli Sara

**Number** 196736

**Funding scheme** Special Call on Coronaviruses

Research institution Universität Luzern

## **Current work**

5 Mins

Development (Strategy & Messages / Material)

#### **QUESTION:**

- I. How did you plan your communicative actions?
- II. How did you identify information needs in your target population?
- III. What exactly was communicated? How were messages designed? What did guide those decisions?
- IV. What did you want to achieve with your communicational efforts?
- V. Do you conduct pre-evaluation or pretesting of the messages or information?

5 Mins

#### Implementation

#### • QUESTION:

- I. What are your target groups? How were they chosen and why?
- II. Which channels were chosen to disseminate the information and why? (Did you choose channels as a function of the targeted audience?)
- III. How did your / your communicative efforts (e.g., with regard to channels / target groups) develop over time?
- IV. Do you have a specific budget allocated to this kind of communication?

We have all theories, models and frameworks to manage infodemics.

Now health institutions and organizations need to prepare.

There is no way back (a time without infodemics?).

Low-quality health information can kill.

Effective institutional communication requires preparation and thus resources.

Overall, it is a main issue for public health.









Follow accurate public health advice from WHO & your local health authority



Follow the news on latest coronavirus updates



To avoid spreading rumors, always check the source you are getting information from



Don't spread rumors

Learn more to Be READY for #COVID19: www.who.int/COVID-19





Many thanks for your attention...