





Infodemic during COVID-19: How to strengthen institutional health communication and community engagement

Prof. Sara Rubinelli

Department of Health Sciences and Medicine, University of Lucerne and Swiss Paraplegic Research

THE FOCUS

During COVID-19 pandemic, health communication faces several challenges

One main challenge: DISINFORMATION

Let's understand this challenge...







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)





A MAJOR PROBLEM DURING COVID-19

YouTube as a source of information on

COVID-19: a pandemic of misinformation?

Heidi Oi-Yee Li o, Adrian Bailey o, David Huynh o, Adrian Bailey



Issue: Ir Med J; Vol 113; No. 5; P85

Going Viral: Doctors Must Combat Fake News in the Fight against Covid-19

C. O'Connor^{1,2}, M. Murphy^{1,2}

Review > J Pak Med Assoc. 2020 May;70(Suppl 3)(5):S162-S165. doi: 10.5455/JPMA.38.

Information Overload and Infodemic in the COVID-19 Pandemic

Farooq Azam Rathore ¹, Fareeha Farooq ²





THE WORLD HEALTH ORGANIZATION



1st WHO Infodemiology Conference









FIRST EVIDENCE ON SAD CONSEQUENCES

Rumors, stigma, and conspiracy theories have the potential to decrease community trust in governments and international health agencies. Rumors can mask themselves as credible infection prevention and control strategies and have potentially serious implications if prioritized over evidence-based guidelines. For example, a popular myth that consumption of highly concentrated alcohol could disinfect the body and kill the virus was circulating in different parts of the world. Tollowing this misinformation, approximately 800 people have died, whereas 5,876 have been hospitalized and 60 have developed complete blindness after drinking methanol as a cure of coronavirus. Similar rumors have been the reported cause of 30 deaths in Turkey.

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COVID-19-Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis

Md Saiful Islam,^{1,2}* Tonmoy Sarkar,¹ Sazzad Hossain Khan,¹ Abu-Hena Mostofa Kamal,³ S. M. Murshid Hasan,⁴ Alamgir Kabir,^{2,5} Dalia Yeasmin,¹ Mohammad Ariful Islam,¹ Kamal Ibne Amin Chowdhury,¹ Kazi Selim Anwar,⁵ Abrar Ahmad Chughtai,² and Holly Seale²





A COUNTRY-PERSPECTIVE

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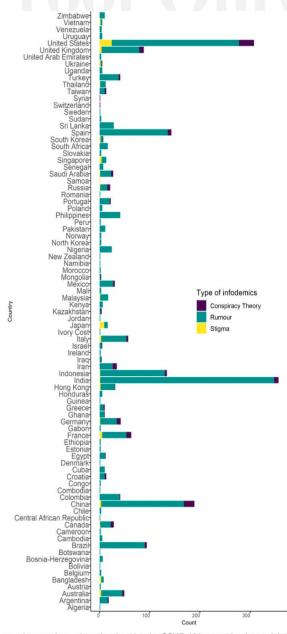






FIGURE 4. Rumors, stigma, and conspiracy theories related to COVID-19 by countries detected during the study, 2020.

ADDITIONAL DEFINITIONS

RUMOR: "unverified in- formation that can be found as true, fabricated, or entirely false after verification"

STIGMA: "Stigma is a socially constructed process through which a person with stigma can experience discrimination and devaluation in society"

CONSPIRACY THEORY: "explanatory beliefs about an individual or group of people working in secret to reach malicious goals"

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Rumor about treatment, prevention, and control

"Eating garlic can cure coronavirus"

"Drinking bleach may kill the virus"

"Drinking alcohol may kill the virus"

"Gargling vinegar and rose water or vinegar and salt may kill the virus in throat"

"Drinking cow urine and cow dung can cure coronavirus"

Conspiracy theory

"Novel coronavirus is engineered, laboratory-generated virus either accidentally or deliberately released in the area of the Wuhan seafood and animal market"

"COVID-2019 outbreak was planned"

"It's a bio-weapon funded by the Bill & Melinda Gates foundation to further vaccine sales"

"Biological weapon manufactured by CIA"

"President Donald Trump targeted the city with coronavirus to damage its culture and honor in Iran"

"The virus is an attempt to wage 'economic war on China"

"America's Jews are driving America's wars"

Stigma

"I am not a virus: French Asians angered by racism"

"Chinese are uncivilized"

"Chinese are bioterrorists"





IN GENERAL, DISINFORMATION ABOUT:

Where the virus comes from

How the virus spreads

Symptoms and treatments

How authorities are responding to the crisis

(Wardle 2020)





FREEDOM OF EXPRESSION:

A **human right** under article 19 of the Universal Declaration:

"Everybody shall have the right to hold opinions without interference" and shall have the right to freedom of expression"

Later amends: the exercise of these rights carries "special duties and responsibilities" and may "therefore be subject to certain restrictions" when necessary

Common limitations include: obscenity, pornography, fighting words, copyright violation, dignity, public security.





DISINFORMATION: NOT AN EASY PROBLEM FROM A LEGAL PERSPECTIVE

British Journal of American Legal Studies | Volume 7: Issue 2

Lying and the First Amendment

Effective lies are often mixed with truth

Retracting a false assertion may, by repeating it, harden the belief

Tendency to shift the burden of lies on speakers and on people's evaluation:

Moral responsibility: lie impedes the rationality of the audience

People' critical skills: assumption that people can think for themselves

Shifting between encouraging self-censorship and approving content-based restrictions. But often a reluctance to exclude lies from constitutional protection...





DISINFORMATION: NOT AN EASY PROBLEM FROM A LEGAL PERSPECTIVE

Task force contro le fake news, Meloni: "Limita la libertà". Martella: "Serve a combattere disinformazione, non opinioni"



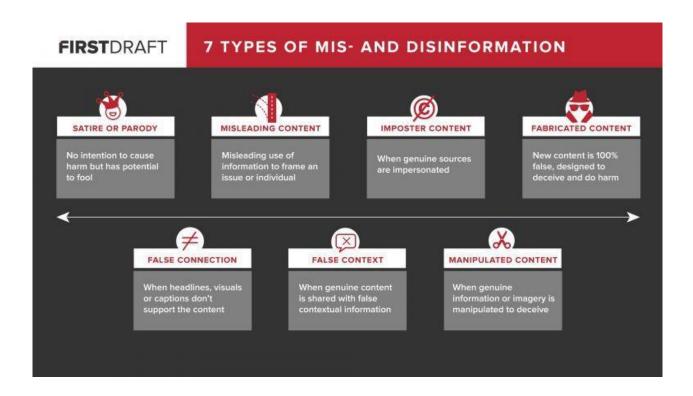
Andrea Martella, sottosegretario con delega all'Editoria (ansa)

Botta e risposta tra la leader di Fratelli d'Italia e il sottosegretario con delega all'Editoria, che ha messo in piedi una Unità per il monitoraggio delle notizie false, composta da rappresentanti del ministero della Salute, della Protezione civile e dell'Agcom. Più un gruppo di esperti volontari, tra cui un medico

For Giorgia Meloni a task force against fake news limits freedom...











Satire or Parody. No intention to harm. To ridicule with the hope to improve society.

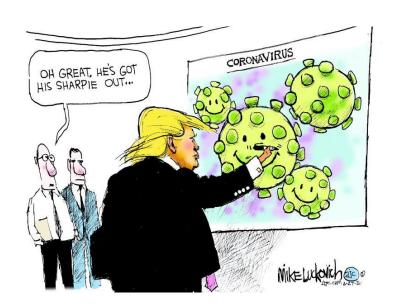
Pitfalls:

This is not funny!

The satirist does support what he says

By ridiculing it damages people









Misleading content. "A misleading use of information to frame issues or individuals in certain ways by cropping photos, or choosing quotes or statistics selectively"

Misleading claims about COVID-19 vaccine spread by 'Plandemic' video

Marisha Goldhamer, AFP USA







Published on Thursday 20 August 2020 at 23:44

Copyright AFP 2017-2020. All rights reserved.

A six-minute clip from the film titled "Plandemic: Indoctornation" seeks to raise fears about the vaccines that could help address the COVID-19 pandemic, and it makes misleading claims about the vaccines currently in clinical trials.





False content







REASONS FOR CREATING AND SPREADING BAD INFORMATION:

No awareness:

- Generalizing over personal experience: "I do not know anyone who went into intensive care, COVID-19 is not such a bad thing"
- Developing view because of lack of knowledge:
 - "Lock-down is against freedom", said by people who have no idea of public health measures and pandemics.
 - "'WHO is such a bad organization". without having ever checked what they do.

Money (selling advertising, getting funds from political parties...)

Populism and propaganda (e.g. against the dominant party and the Government)

Visibility and "fame"





REASONS FOR CREATING AND SPREADING BAD INFORMATION:

Entertainment (talk-show style)

To harm someone's reputation

Get revenge from "failures", e.g. in one profession (a journalist attaching official newspapers)

Dissemination for blind trust in certain influencers (e.g. political heroes)





REASONS FOR CREATING AND SPREADING BAD INFORMATION:



Swiss perspectives in 10 languages

WHO and other experts say no evidence of COVID-19 losing potency

Professor Alberto Zangrillo, head of intensive care at Italy's San Raffaele Hospital in Lombardy, which bore the brunt of Italy's COVID-19 epidemic, on Sunday told state television that the new coronavirus "clinically no longer exists."

But WHO epidemiologist Maria Van Kerkhove, as well as several other experts on viruses and infectious diseases, said Zangrillo's comments were not supported by scientific evidence.

There is no data to show the new coronavirus is changing significantly, either in its form of transmission or in the severity of the disease it causes, they said.





PERSONAL FACTORS:

Confirmation bias: Seeking and valuing information that confirms our preexisting beliefs

• "The numbers of cases is growing? I do not care. The fact is that Government lock-down has damaged the economy and I have just read about this case of a person who committed suicide because of his post-COVID financial situation"

Echo chamber effect: we primarily exposed to information, people, events, and ideas that already align with our point of view.

• Facebook friends, for instance: valuing the 'I like' as a proof that we are right. But we tend to have as friends only people who align with our point of view.

Backfire effect: when core beliefs are challenges, it can cause us to believe more strongly

• "COVID is still spreading: health institutions are saying this over and over. You still have to be careful: always bring a mask with you". "The only thing that is clear to me is that you are an idiot...".





PERSONAL FACTORS BEHIND:

The Dunning-Kruger effect: the more you know, the less confident you are (and the opposite)

A real message sent to the Director of a health institution by a person who works in a pet-shop:

"Covid 19 pandemic will is the biggest fraud of the century. You have been plagiarized by the TV and print media junk and doctors paid by WHO to say bullshit on TV. Studies show how the immune system works: covid-19 has never been dangerous because we have the immune system! This is all we need. You are idiots and you should watch real information!"

He then suggest to watch the "real" information and send a video...







PERSONAL FACTORS BEHIND:



Shiva Ayyadurai

From Wikipedia, the free encyclopedia

V. A. Shiva Ayyadurai (born Vellayappa Ayyadurai Shiva,^[2] December 2, 1963)^[3] is an Indian-American scientist, engineer, politician, entrepreneur, and promoter of conspiracy theories and unfounded medical claims. He is notable for his widely discredited claim to be the "inventor of email",^[4] based on the electronic mail software called "EMAIL" he wrote as a New Jersey high school student in the late 1970s,^{[5][6]} Initial reports that repeated Ayyadurai's assertion—from organizations such as *The Washington Post* and the Smithsonian Institution—were followed by public retractions.^{[5][7]} These corrections were triggered by objections from historians and ARPANET pioneers who pointed out that email was already actively used in the early 1970s.^[3]





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)





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

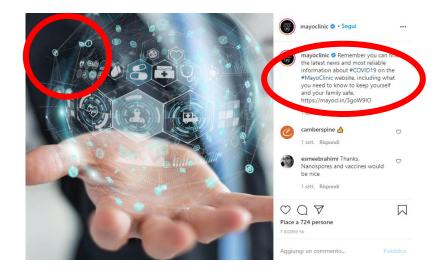
Contribute to debunking (see below)





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)





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 logical fallacies in conspiracy theories, they may "#takecarebeforeyoushare become less vulnerable to such theories"

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

(Lewandosky & Cook 2020)





Sharing is not always caring. Pause and take your time

before you share information online







8. CONTRIBUTE TO DEBUNKING

\rightarrow How to:

Provide accurate information; link to fact checkers; explain the misleading techniques or flawed reasoning; reduce the credibility of conspiracy theorists

Provide an alternative narrative to "replace" the wrong one and to explain why it is wrong

Minimize unnecessary repetition of misinformation

Consider the "tipping point" – When is it time to speak about a rumor (trying to avoid the effect of amplifying it)?

(Swire, Ecker 2018; Lewandosky & Cook 2020; Wardle 2020)







INTERNATIONAL INSTITUTIONS

Take the pulse of the situation worldwide

Become the reference and **provide support for national and local institutions**

 e.g. create factsheets, guidelines, gather the scientific evidence and identify areas on which there is the agreement of the scientific community

Promote basics recommendations and fight widely spread myths

- e.g. covid-19 pandemic: wash or sanitize hands; avoid touching mouth, nose and eyes; keep distance
- e.g. covid-19 pandemic: drinking bleach does not prevent it

Limitation: difficult to target your communication because your audience is international: no everyone speaks English; beliefs and worries are often very local, influenced by culture, national politics, events and celebrities; etc.







NATIONAL INSTITUTIONS

Take the pulse of the situation in your country

 e.g. conspiracies theories that circulate most in your country, fears and beliefs that put in danger the compliance to recommendations, the presence of opinion leaders who spread misinformation

Adapt the communication to your country, in terms of language, content and culture

Establish a **national network of mutual support**: which institutions can help spread your message?

 e.g. the Federal Office of Public Health partners with Health Promotion Switzerland and the Swiss Medical Association to spread a common message







LOCAL INSTITUTIONS

e of the situation in your **region/audience** (e.g. diabetes community, school teachers)

Connect/collaborate with and refer to other regional/national/international institutions

• e.g. share their posts, translate their posts

Tailor the communication to your audience

- e.g. diabetes patients want to know if they are at risk of complications for covid-19 and what they have to do to protect themselves
- e.g. school teachers want to know if children are particularly at risk, if they have to adapt the teaching method to keep distance, if parents should be allowed into the buildings or not







How to implement these recommendations?

Institutions have the duty to show **if** and **why** some information is suboptimal and to **correct** it.

A 3-step approach:

MONITOR: to identify knowledge, beliefs, facilitators and barriers to behavior change, as well as overall reasons for current behavior

MESSAGE DESIGN and DELIVERY: to develop (if possible, with pre-testing) tailored messages that can be perceived by individuals as relevant, clear and procedural (i.e., orient people on how to behave and why)

EVALUATE THE IMPACT OF MESSAGES: to identify facilitators and barriers to the dissemination and uptake of messages





HOW TO IMPLEMENT THESE RECOMMENDATIONS?

utions should have communication offices, with **experts in persuasive on** that can adopt a health marketing approach

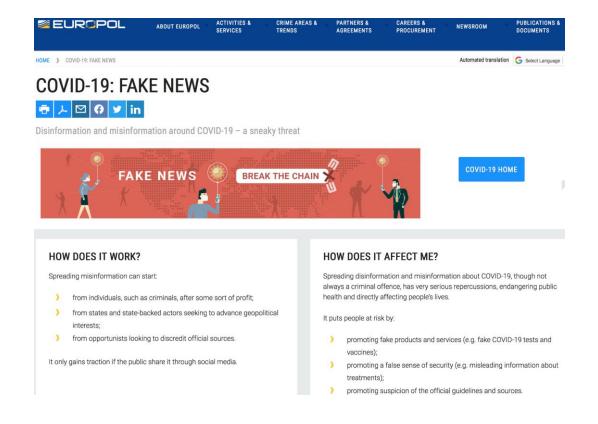
This includes knowledge and skills in the following fields:

- Persuasion
- Social marketing
- Social media monitoring
- Advertising
- Community engagement
- Scientific journalism
- Knowledge translation and dissemination
- Mass-media communication
- Story-telling
- Risk communication
- Health campaigns
- Rhetoric and argumentation theory
- Critical thinking





SOME EXAMPLES









SOME EXAMPLES

Facebook steps up fight against coronavirus misinformation

Facebook has been flooded with campaigns touting fake cures and conspiracies about the origins of the virus. The new features include warning ordinary users who have liked or shared inaccurate or harmful material.









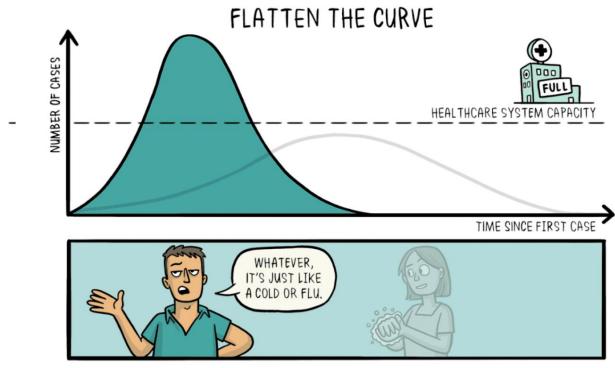












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'ADAPTED FROM @DREWAHARRIS, THOMAS SPLETTSTÖBER (@SPLETTE) AND THE CDC' CC-BY-SA





SOME READINGS

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