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# Journal of the European Association for Health Information and Libraries

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## Managing the infodemic: what can be done?

**Federica Napolitani**

Editor in Chief

Istituto Superiore di Sanità, Rome, Italy

Contact: federica.napolitani@iss.it

Dear EAHIL members

We are all aware of the consequences that infodemic has been causing during the pandemic. A pandemic that, differently from its predecessors, is spreading in a world that is both incredibly globalized and highly digitalized.

Since the first days of the COVID-19 outbreak, we've witnessed an over-abundance of information, both accurate and inaccurate, as well as a "tsunami" of publications aimed at disseminating, as quickly as possible, information and data on the new virus. Undeniably, it was "too much information" - as quoted in the World Health Organization (WHO) definition of infodemic. Perhaps, also too much information mixed with views that ended up by causing uncertainty amongst people, leading to behaviour potentially harmful for health. The scope note of the MeSH term "Infodemic" (MeSH 2022) focuses on the core of the problem: "as facts, rumours, and fears mix and disperse, it becomes difficult to learn essential information about an issue (from Merriam Webster Dictionary)".

Can the community of librarians and information specialists tackle this difficulty? Can they be of help in fighting the infodemic? Katri Larmo (University of Helsinki, Finland) and Michelle Wake (UCL, UK), both members of *JEAHIL* Editorial Board, along with the authors of the articles published in this December issue, help us with the challenge of managing misinformation. I wish to thank Katri and Michelle for editing the issue, and the authors for accepting the invitation and writing for *JEAHIL*.

Exciting news in sight for EAHIL in 2022! Would you like to know more? Don't miss the Letter from our President Lotta Haglund, who kindly keeps EAHIL members periodically updated with important information on the life of the association.

I'm also glad to present the very first report from the Evidence-Based Information Special Interest Group (EBI-SIG) published in the News from EAHIL section of the journal. EBI-SIG aims at improving the quality of systematic reviews, as the authors of the report explain in introducing us to the group activities and to its future projects.

EAHIL works in strict contact with sister organizations (see the [list](#) online). Representatives to and for EAHIL have an important task in strengthening this collaboration and I am sure you'll appreciate their effort in finding the time to write their reports about developments, news, events occurring in their respective associations. This time, I wish to thank Carol Lefebvre and Dianne Babski for their reports on the US Medical Library Association and on the US National Library of Medicine. I am also looking forward to hearing from

the Association for Health Information and Libraries in Africa (AHILA), from ALIA Health Libraries Australia (HLA), from the Canadian Health Libraries Association (CHLA) and from Taiwan Medical Library Association (TMLA).

In this issue, Letizia Sampaolo, member of *JEAHIL* Editorial Board, opens her regular column on Publications and new Products with a humorous note, and rightly reminds us: "let's not forget to smile"!

Finally, I wish to inform you that the Journal's March issue will be a no-theme issue (deadline for submission online: 5th of February), whereas the June issue will be focusing on open education, open science. If you wish to contribute to the latter, please contact editors Fiona Brown and Petra Björk (deadline for submission: 5th of May).

*I wish you all the happiest of holidays and an abundance of health and joy for this coming 2022.*

*Federica*

## MONOGRAPHIC SECTION

### Infodemics and libraries

*Edited by*  
Katri Larmo (a) and Michelle Wake (b)

(a) Terkko - Medical Campus Library, Helsinki University Library, Finland  
katri.larmo@helsinki.fi

(b) UCL Library Services, University College London, UK  
m.wake@ucl.ac.uk



## Infodemics and libraries

### **Katri Larmo**

Terkko - Medical Campus Library, Helsinki University Library, Finland  
Katri.larmo@helsinki.fi



### **Michelle Wake**

UCL Library Services, University College London, UK  
m.wake@ucl.ac.uk

Infodemiology, the study of distribution of health information and misinformation, is not a new invention. The first studies on it were published already in the late 1990s (1). Since then fake news and “digital toxicity” have been growing massively (2, 3). COVID-19 pandemic escalated these phenomenon into an infodemic, i.e. overabundance of information – some accurate and some not – that can lead to confusion and mistrust in governments and public health response (4, 5). Gunther Eysenbach gives four key elements on how to manage the infodemic: 1. information monitoring (infoveillance); 2. building eHealth Literacy and science literacy capacity; 3. encouraging knowledge refinement and quality improvement processes such as fact checking and peer-review; and 4. accurate and timely knowledge translation, minimizing distorting factors such as political or commercial influences (6).

Here we as information professionals have a big role to play (7) and that’s why we dedicated this issue to this topic. We are very happy to present three highly interesting papers. Anu Ojaranta, Eeva-Liisa Eskola and Kristina Eriksson-Backa explore the sources, amounts and emotions of corona-related information in the early stages of the pandemic, based on their survey in 2020. Ruth Carlyle and Sue Robertson describe developing health literacy skills for both the general public and health professionals. Oksana Pyzik, John Hertig, Hoda Kanso, Anika Chamba and Sofia Khan describe the relationship between fake news and fake medicines: how misinformation has fuelled the sale of COVID-19 substandard and falsified medical products.

## REFERENCES

1. Eysenbach G. Infodemiology: the epidemiology of (mis)information. *The American Journal of Medicine*. 2002;113(9):763–5.
2. Rocha YM, de Moura GA, Desidério GA, de Oliveira CH, Lourenço FD, de Figueiredo Nicolete LD. The impact of fake news on social media and its influence on health during the COVID-19 pandemic: a systematic review. *Z Gesundh Wiss*. 2021;1-10.

## PREFACE

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3. Commentary: Digital toxicity Another side effect of COVID-19 pandemic: Indian Journal of Ophthalmology. 2021; 69 (7):1907-8. doi: 10.4103/ijo.IJO\_1362\_21. <https://oae.ovid.com/article/02223307-202107000-00058/HTML>
4. Alvarez-Galvez J, Suarez-Lledo V, Rojas-Garcia A. Determinants of Infodemics During Disease Outbreaks: A Systematic Review. *Frontiers in Public Health*. 2021;9.
5. WHO Infodemic Management: <https://www.who.int/teams/risk-communication/infodemic-management>
6. Journal of Medical Internet Research - How to Fight an Infodemic: The Four Pillars of Infodemic Management  
[https://www.jmir.org/2020/6/e21820/?utm\\_source=TrendMD&utm\\_medium=cpc&utm\\_campaign=JMIR\\_TrendMD\\_0](https://www.jmir.org/2020/6/e21820/?utm_source=TrendMD&utm_medium=cpc&utm_campaign=JMIR_TrendMD_0)
7. Naeem SB, Bhatti R. The Covid-19 'infodemic': a new front for information professionals. *Health Information & Libraries Journal*. 2020;37(3):233-9.



# Exploring perceptions of the COVID-19 infodemic

Anu Ojaranta (a), Eeva-Liisa Eskola (b) and Kristina Eriksson-Backa (b)

(a) Regional State Administrative Agency for Southwestern Finland, Turku, Finland

(b) Information Studies, Åbo Akademi University, Turku, Finland

## Abstract

*The flow of information about COVID-19 has caused an infodemic worldwide. This paper presents results from a survey study conducted in Finland in the spring of 2020. The aim is to explore the most important sources or channels for corona-related information in that early stage of the pandemic, as well as how the amount of information was perceived and which emotions were related to this information among 208 respondents aged 30 years and over. News media, social media and official information were most important. The amount of information was perceived as suitable by many, but others experienced an overload, and the obtained information largely raised negative emotions including concern, fatigue and irritation. The results hence largely follow earlier studies.*

**Key words:** anxiety; COVID-19; fatigue; news; pandemics.

## Introduction

The coronavirus pandemic that has swept over the globe since early 2020 has caused a situation unparalleled to anything most people have ever experienced, and led to changes in societies, including that of Finland. In addition, there is an abundance of information available from many kinds of sources and channels, causing an infodemic. Human information behaviour during the COVID-19 crisis has been studied from different angles: how traditional and social media were used during this time, infoveillance of activity on search engines and social media, studies related to misinformation, disinformation or infodemics, and studies that have looked at uncertainty and emotions. Studies have also focused on contexts such as educational environments and everyday life (1). Our paper adds to some of these themes and presents results from a survey study conducted in spring 2020 within the subject Information Studies at Åbo Akademi University, Finland, as a result of the question that was raised on how corona-related information was used and perceived. This paper explores the sources and channels for corona information, as well as perceptions of the amount of information and related emotions among people aged 30 years and over. An earlier paper (2) has reported results on young people (18-29 years) taking the same survey.

## Literature review

### *Information seeking in crisis*

Studies have looked at human information behaviour in different crises, especially caused by natural disasters (3-5). Lopatovska and Smiley (3) found that the nature of information needs, the activity of information seeking and the used sources were related to the stage of the impact of a hurricane. In a recent study on the COVID-19 pandemic, Lloyd and Hicks (6) identified three phases of information environments named unfolding, intensifying and maintaining. Also other studies show that people tend to seek more information from various information sources during times of crises (7), with the COVID-19 situation being no exception. People consumed more news and looked for more information from a variety of sources in the early stages of the crisis (8). Health information seeking increased notably among students, compared to before the corona crisis. Interpersonal contacts and traditional mass media became more important as sources than before, but online sources and especially social media were the most important (9).

### *Emotions and information seeking*

Emotions have been present in information behaviour theories and research since the 1960s (10). Emotions

*Address for correspondence:* Anu Ojaranta, Regional State Administrative Agency for Southwestern Finland, Itsenäisyydenaukio 2, Turku, Finland. Email: [anu.ojaranta@avi.fi](mailto:anu.ojaranta@avi.fi)

such as frustration, happiness, fright and sadness were present in information behaviour during a hurricane and emotional states are considered important because of their influence on information behaviour (3). Information overload is a situation where an individual is unable to use information efficiently and effectively due to the amount of available information. Information overload may cause anxiety and fatigue because of abundance, but also scarcity of information, diversity, complexity and novelty of information may cause uncertainty (11). Increased stress or fear, or increased frustration or confusion might be reasons for information avoidance (12). Relationships between social media exposure, information overload and information anxiety, as well as information overload as a predictor of information anxiety have been found in the context of COVID-19 (13). In a Dutch study, almost 60% had felt overloaded by the amount of information in the beginning of the crisis and an initial increase in information seeking later changed to a tendency to avoid information merely because of negative emotions and feelings (8). Negative affective risk responses and information overload as well as feeling distressed by information are also related to information avoidance (14, 15). In China, sadness, anxiety and cognitive dissonance, as a result of perceived threat and perceived information overload affected information avoidance, which in its turn predicted reluctance to take part in preventive behaviours related to COVID-19, as well (16). Similar results were found in Germany (15). Avoidance of information can, on the other hand, also have a positive effect on perceived mental well-being (8).

### Research questions

This paper aims at answering the following research questions:

RQ1: Which information sources or channels on COVID-19 are most used and why?

RQ2: How is the amount of corona-related information experienced and what kinds of emotions does the amount generate?

### Material and method

The data for the study were collected by an online survey from March 23rd to May 15th, 2020. The survey was available in Finnish, Swedish and English, and was disseminated via researchers' own networks, the Information Studies subject's social media accounts, the university website and social media accounts, and the

national Finnish public library website.

In addition to background questions, the survey consisted of five open-ended questions with sub-questions (see Appendix 1). The results presented here are collected from questions 1 and 3 concerning information sources, amount of information and related emotions. The survey participants were instructed to answer freely, which also causes limitations in the interpretation of, for example, in which format a source was accessed (online, print, TV). The data was analysed by using the NVivo qualitative data analysis programme, and partly manually. The statements concerning emotions were analysed inductively through comparing and finding differences and similarities.

The survey was taken by a total of 261 respondents born between 1941 and 2000. However, in this paper, only 208 respondents born in 1990 or earlier are included. Of these, 165 were female (79%), 38 male (19%), and 5 (2%) did not want to define their gender. Most of the 208 respondents were employed (n=161), followed by those who were retired (n=28), unemployed (n=7), students (n=6), homemakers (n=3) and self-employed (n=3).

### Findings

#### *The most used information sources and channels and the motivations to use them*

Generally, the respondents tended to use very much the same sources/channels on COVID-19 information, although the number of reported sources varied from one up to ten and even more. The top five sources/channels mentioned in the responses are reported in Figure 1. The Finnish Public Service Media Company (Yle)

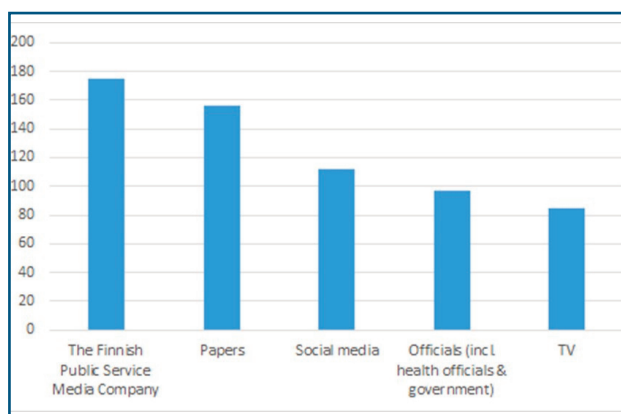


Fig. 1. The most used sources and channels for corona-related information.

was mentioned in most of the answers (n=175) and different papers including newspapers, evening papers and journals were commonly used, as well (n=156). The sources/channels following these were social media (incl. e.g. Facebook, Instagram, Twitter) (n=112), officials including health officials and government (n=97), and TV (n= 85).

Additionally, the respondents also, to a lesser extent, mentioned radio, people (e.g., friends, family, relatives, co-workers), foreign broadcast companies and workplace information as sources or channels.

Those respondents who motivated their choices mostly considered the source or channel reliable, objective and up-to-date. Some reported familiarity with the source/channel, while others brought out the fast communication through the chosen channel as reasons to use the source/channel. Social media were often mentioned in connection with informal information exchange, such as discussing thoughts and experiences with friends and family, but occasionally also as a rapid channel for more official information.

### **Experiences of the amount of corona-related information and the emerging emotions**

Of all the respondents, 60% (n=124/208) commented specifically on the amount of information and their responses are reported in the following.

The respondents experienced the amount of information in three different ways: there is an abundance of information (n=83/124), there is a suitable amount of information (n=37/124), and there is too little information (n=4/124). Accordingly, the three categories of emotions emerging in connection to the experienced amount of the corona-related information were identified as Concern (i.e. anxiety, fear, panic, stress, worry), Fatigue (i.e. exhaustion, boredom, dullness, tiredness), and Irritation (i.e. anger, irritation).

Majority of the respondents (n=83/124) indicated that there is a lot of information on COVID-19, however they reacted to the abundance of information differently. Some considered it as neutral, just noting the state of affairs, while others experienced the abundance of information as negative, and few respondents as positive. Those respondents (n=30/83) who expressed that there is an abundance of corona-related information but considered it as neutral mostly did not express any emotions, as demonstrated by the following example:

*there is a lot of information. It fills nearly all news sources and nothing else is discussed. This does not resonate any*

*particular emotions (Female, 1979, employed).*

It was very common (n= 40/83) that the respondents reacted to the abundance of corona-related information negatively. This was expected, since there was an overwhelming amount of corona-related information available during the researched period in Finland, which also led to information avoidance among some respondents, for example:

*knowledge adds pain. I limit the overflow, I read only the most important news (Female, 1976, employed).*

Regarding the emotions, the category of Concern dominated, exemplified by the following quotation:

*the overload causes a lot of anxiety and confusion sometimes (Male, 1983, unemployed).*

The second most common emotion category was Fatigue, for example:

*sometimes one becomes just completely exhausted – one is just not capable of keeping up with all the theories, projections and programmes (Male, 1982, employed).*

The emotion category Irritation was the third most common category:

*there is occasionally too much information. Same information is repeated everywhere, sometimes it irritates, while information is not removing Corona (Female, 1961, employed).*

A few respondents (n=13/83) considered the abundance of information as positive. A positive attitude towards the information abundance was, for example, connected to a feeling of security as in the following quote:

*the more there is information, the stronger the feeling grows that everything is under control (Female, 1964, employed).*

The expressions of emotions connected to a positive view were few in number and were thus not categorized. A number of respondents (n=37/124) expressed that they were reasonably content with the amount of information. However, this did not mean that they did not utter any emotions or feelings related to information generally, for example the following respondent is happy with the amount of information, but emphasizes that it is the subject matter which generates different emotions:

*I think that the amount of information is good and sufficient. If somebody wants more information s/he can find it. The amount of information does not arouse any special emotions, it is rather the information contents that may raise emotions (Female, 1989, employed).*

Mostly, the emotions related to a suitable amount of information fall into the emotion category of Concern.

Only a few respondents (4/124) conveyed that there was too little information. The scarcity of information could cause anxiety and worry, that is, emotions belonging to the category Concern.

## Discussion and conclusions

Crises generally influence the information needs, seeking and selection of sources, which can differ during different stages of the crisis. The COVID-19 crisis has been no exception (3-4, 6-8). In this study, news media channels, especially the Finnish national broadcaster *Yle* and newspapers, evening papers and journals, were used by a vast majority of respondents. In addition, social media channels and official information were widely used. These sources were mainly considered reliable, objective and current. The responses did, however, not reveal whether, for example, *Yle* was used as a channel for information from health authorities or the government, who at the time gave frequent press conferences, or whether papers were read in print or online. Our respondents differ from German students, who mainly preferred social media, although mass media sources became more important, as well (9). The focus was, however, on slightly older people, who mainly considered social media as channels for informal information. Another German study, on the other hand, found that websites and social media were more often avoided than interpersonal conversations and other media (14). In the UK, social media information overload caused social media fatigue and negatively affected mental well-being in young people, and led to increased avoidance of such media (17). Regularly receiving news about COVID-19 led to negative emotions, especially anxiety, also among Iranians (18). Our respondents were either content with the amount of information or felt that there was too much or too little information. Those who experienced an abundance of information were either neutral to the abundance, or considered it a negative or positive issue. A negative view related to feelings of concern, fatigue and irritation. Also too little information could, however, cause concern. In a study on younger people (2), the negative emotions stress and anxiety, fear, anger and disgust were also more common than positive or neutral emotions. Perceptions of overload of COVID-19 information have largely led to information avoidance (8, 14-17), and also in our study respondents occasionally avoided information. Avoidance can be problematic if it leads to neglect of preventive behaviour in relation to COVID-19 (15, 16). Our study did, however, not examine possible consequences.

In conclusion, information about COVID-19 was obtained from a variety of especially media sources/channels, and respondents often used many different sources. The abundance of information influenced emotions, mainly negatively. Emotions are an important part of information behaviour and to prohibit information avoidance and possible negative consequences of it, emotions should be taken into account when providing information in critical situations.

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*Submitted on invitation.*

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## REFERENCES

1. Montesi M. Human information behavior during the COVID-19 health crisis. A literature review, *Libr Inf Sci Res.* 2021;101122 <https://doi.org/10.1016/j.lisr.2021.101122>.
2. Karim M, Singh R, Widén G. Dealing with the COVID-19 infodemic: understanding young people's emotions and coping mechanisms in Finland and the United States. *Nord J Libr Inf Stud.* 2021;2(1):38-57. <https://doi.org/10.7146/njlis.v2i1.125220>
3. Lopatovska I, Smiley B. Proposed model of information behaviour in crisis: the case of hurricane Sandy. *Inf Res.* 2014;19(1): paper 610. <http://InformationR.net/ir/19-1/paper610.html>
4. Pang N, Karanasios S, Anwar M. Exploring the information worlds of older persons during disasters. *J Assoc Inf Sci Technol.* 2020;71(6):619-31. <https://doi.org/10.1002/asi.24294>
5. Rahmi R, Joho H, Shirai T. An analysis of natural disaster-related information-seeking behavior using temporal stages. *J Assoc Inf Sci Technol.* 2019;70(7):715-72. <https://doi.org/10.1002/asi.24155>
6. Lloyd A, Hicks, A. Contextualising risk: the unfolding information work and practices of people during the COVID-19 pandemic. *J Doc.* 2021;77(5):1052-1072. <https://doi.org/10.1108/JD-11-2020-0203>

7. Pang N. Crisis-based information seeking: monitoring versus blunting in the information seeking behaviour of working students during the Southeast Asian Haze Crisis. In: Proceedings of ISIC, the Information Behaviour Conference; 2-5 September 2014; Leeds, UK: Part 1, (paper isic14); 2014. <http://InformationR.net/ir/19-4/isic/isic14.html>
8. de Bruin K, de Haan Y, Vliegenthart R, Kruikemeier S, Boukes M. News avoidance during the COVID-19 crisis: understanding information overload. *Digit Journal*. 2021;ahead-of-print: 1-17. <https://doi.org/10.1080/21670811.2021.1957967>
9. Schäfer M, Stark B, Werner AM, Tibubos AN, Reichel JL, Pfirrmann D, Edelmann D, Heller S, Mülder LM, Rigotti T, Letzel S, Dietz P. Health information seeking among university students before and during the corona crisis-findings from Germany. *Front Public Health*. 2021;25(8): 616603. <https://doi.org/10.3389/fpubh.2020.616603>
10. Nahl D. Introduction. In: Nahl D, Bilal D, Eds. *Information and emotion: The emergent paradigm in information behavior research and theory*. Medford, NJ: Information Today; 2007.
11. Bawden D, Robinson, L. Information overload: An overview. In: *Oxford Encyclopedia of Political Decision Making*. Oxford: Oxford University Press; 2020.
12. Choo CW. Seeking and avoiding information in a risky world. *Inf Res*. 2017;22(3): paper 765. <http://InformationR.net/ir/22-3/paper765.html>
13. Soroya SH, Farooq A, Mahmood K, Isoaho J, ZARA SE. From information seeking to information avoidance: understanding the health information behavior during a global health crisis. *Inf Process Manag*. 2021;58(2):102440. <https://doi.org/10.1016/j.ipm.2020.102440>
14. Link E. Information avoidance during health crises: predictors of avoiding information about the COVID-19 pandemic among German news consumers. *Inf Process Manag*. 2021;58(6):102714. <https://doi.org/10.1016/j.ipm.2021.102714>.
15. Siebenhaar KU, Köther AK, Alpers GW. Dealing with the COVID-19 infodemic: distress by information, information avoidance, and compliance with preventive measures. *Front Psychol*. 2020;11:2981. <https://www.frontiersin.org/article/10.3389/fpsyg.2020.567905>
16. Song S, Yao X, Wen N. What motivates Chinese consumers to avoid information about the COVID-19 pandemic? The perspective of the stimulus-organism-response model. *Inf Process Manag*. 2021; 58(1):102407. <https://doi.org/10.1016/j.ipm.2020.102407>
17. Liu H, Liu W, Yoganathan V, Osburg V-S. COVID-19 information overload and generation Z's social media discontinuance intention during the pandemic lockdown. *Technol Forecast Soc Change*. 2021;166:120600. <https://doi.org/10.1016/j.techfore.2021.120600>
18. Hamidein Z, Hatami J, Rezapour, T. How people emotionally respond to the news on COVID-19: an online survey. *Basic Clin Neurosci*. 2020; 11(2): 171-8. <https://doi.org/10.32598/bcn.11.covid19.809.2>

### Appendix 1. Survey questions

Background information: Year of birth, Gender, City/municipality of residence, Are you: Student/ Employed/ Self-employed/Unemployed/ Homemaker/Retired? In which language(s) do you seek/get information? Do you belong to a risk group? Have you or someone in your immediate environment been diagnosed with the coronavirus disease?

- 1) From where do you get information/news about the corona epidemic at the moment? How do you update yourself about the corona situation? (For example government health services websites, yle news on television and/or radio, on websites, newspapers, friends, relatives, social media such as Facebook, Instagram, Youtube, Whatsapp, Snapchat, TikTok etc.)?
  - a) Why do you choose these sources? People can have a need to receive different kinds of information, and both formal and informal information can be important.
- 2) Is false/unreliable information about the corona situation a problem for you (for example rumours, misunderstandings, misleading information (disinformation) or contradicting information)?
  - a) Why is it a problem? b) How do you evaluate the reliability of the corona information or news?
- 3) How do you cope with the amount of information/news about the corona situation (too much information, too little information)?
  - a) What kinds of feelings do you have about the amount of information?
- 4) Can you give us 1-2 examples of good and 1-2 examples of bad experiences regarding the information about the corona epidemic?
- 5) Any other experiences you would like to share regarding corona information in general?



# Balancing long-term health literacy skills development with immediate action to facilitate use of reliable health information on COVID-19 in England

Ruth Carlyle and Sue Robertson

National NHS Knowledge and Library Services team, Health Education England, UK

### Abstract

*High-quality healthcare information exists for patients and the public, but a high proportion of individuals do not have the skills to access, assess and use this information. Health Education England leads the strategic development of knowledge and library services in the National Health Service (NHS) in England. One of the goals of the Knowledge for Healthcare strategy is that staff, learners, patients and the public are better equipped to use evidence-based patient, health and wellbeing information for shared decision-making and self-care. This paper outlines a partnership approach to raising awareness of health literacy, and improving the health literacy awareness and skills of NHS staff and citizens, whilst meeting immediate needs to access trustworthy information on COVID-19.*

**Key words:** *health literacy; consumer health information; libraries, medical; COVID-19; health resources.*

### The healthcare context in England

Healthcare is a knowledge business, dependent on using evidence and knowledge to inform decisions. In the United Kingdom, leadership for the National Health Service (NHS) is devolved to the each of the separate nations: Scotland, Northern Ireland, Wales and England. Health Education England (HEE) plans and commissions the education and training of current and future staff within the NHS in England (1). Strategic leadership for NHS knowledge and library services in England is also part of HEE's role (2). Across the NHS in England, healthcare is provided by complex networks of separate organisations across local communities and in hospitals. Locally, 183 NHS knowledge and library services equip NHS staff and learners with information, supported by nationally-procured digital evidence and knowledge resources. Mostly based within hospitals, these services operate increasingly across local communities (3) and provide evidence for both clinical and managerial decision-making.

*Knowledge for Healthcare 2021 - 2026* was published in January 2021, the second iteration of HEE's strategy to develop NHS knowledge and library services (4). A key workstream within the strategy is to ensure that staff, learners, patients and the public are better equipped to use evidence-based patient, health and wellbeing information for shared decision-making and self-care (5).

### A skills-development approach to tackling misinformation

High-quality, accurate healthcare information materials exist for the public, but a high proportion of individuals struggle to find and use them. HEE's national NHS knowledge and library services team takes a skills-development approach to building health literacy and so to tackling misinformation, enabling healthcare professionals, non-healthcare information providers and members of the public to develop the skills to access, assess and use health information. These are health literacy skills, which equip people both to find

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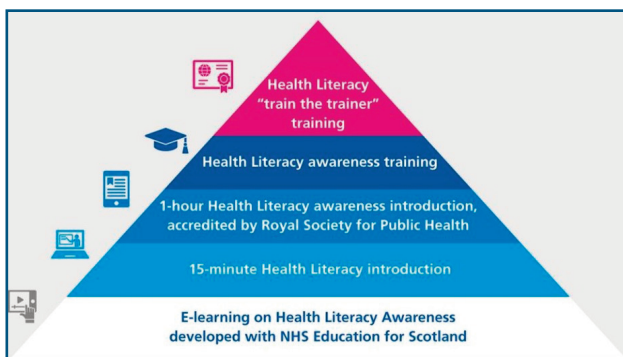
*Address for correspondence:* Ruth Carlyle, Health Education England, 23 Stephenson Street, Birmingham B2 4BJ, UK.  
E-mail: [Ruth.Carlyle@hee.nhs.uk](mailto:Ruth.Carlyle@hee.nhs.uk)

high-quality information and to spot and choose to disregard misinformation. In England, 43% adults aged 16-65 struggle to understand words-based health information; when numbers are added, this rises to 61% finding healthcare information hard to understand and use (6).

### **Health literacy awareness and techniques for NHS staff**

Part of the approach is to equip local NHS knowledge and library services staff to engage with NHS staff, raising awareness of health literacy and sharing health literacy techniques to improve communication skills (7). In July 2021, the National Institute for Health and Care Excellence (NICE) issued guidelines for England and Wales on shared decision-making. These guidelines indicate that health literacy techniques should be used in conversations about decisions (8). This provides a hook for NHS knowledge and library services teams to engage with NHS staff and students on health literacy awareness and techniques.

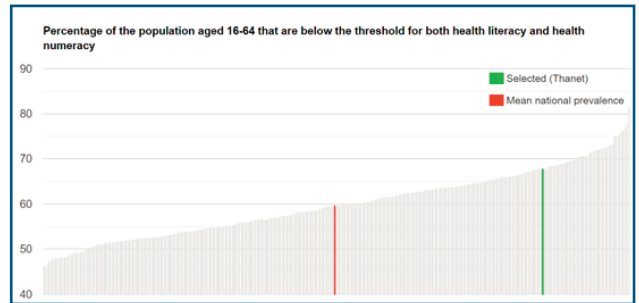
HEE's national NHS knowledge and library services team provides a suite of training tools (Figure 1) ranging from a full train-the-trainer offer to a 1-hour training programme accredited by the Royal Society for Public Health and a 35-minute E-Learning programme developed in partnership with NHS Education for Scotland (9). These tools are shared by local NHS knowledge and library services staff with colleagues in the NHS. The E-Learning is also promoted more widely and has an average of 240 users each month.



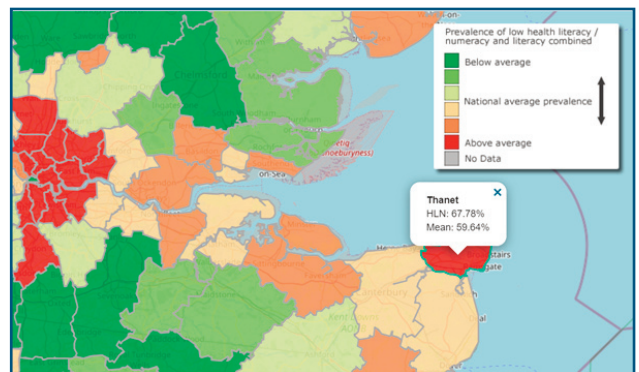
**Fig. 1.** Suite of health literacy training tools provided by Health Education England national NHS knowledge and library services team.

To help local NHS organisations to prioritise the geographic areas on which to focus health literacy activity,

HEE commissioned the University of Southampton to generate geodata maps of health literacy levels, based on literacy and numeracy levels in different boroughs (10). This tool enables staff working in health and care to search for a local borough, to see how health literacy levels rank nationally (Figure 2), or to identify an area on a map and compare health literacy levels locally (Figure 3).



**Fig. 2.** National ranking by borough of the percentage of the population aged 16-64 who struggle with health information that combines words and numbers, with Thanet as example. Data from 2011 Skills for Life survey (11) with 2016 population projections (currently the most recent).



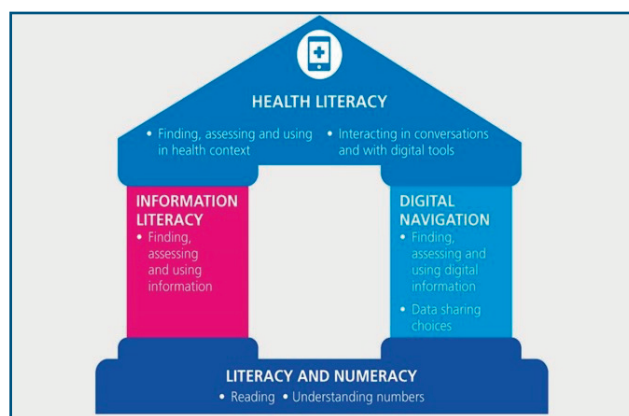
**Fig. 3.** Map showing ranking by borough of the percentage of the population aged 16-64 who struggle with health information that combines words and numbers. Data from 2011 Skills for Life survey (11) with 2016 population projections (currently the most recent).

### **Health literacy skills for citizens**

Citizens need skills to identify misinformation. To address this, HEE is working with the Chartered Institute of Library and Information Professionals (CILIP), Libraries Connected (the organisation working strategically with local public libraries) and Arts Council England as core members of a National Health and

Digital Literacy Partnership. Our aim is that citizens will have the health literacy skills, the underpinning digital skills and resources to find and use trustworthy information to make shared decisions, manage their health and wellbeing and make best use of health services. The partners are joined by a range of information providers to develop resources, spread skills and to pilot these in local test sites.

Staff in libraries for the public and in education are well placed to help people develop health literacy skills, as this builds on the information literacy and digital navigation training that library staff already provide (Figure 4). Public library staff can, for example, include health examples when providing training on information literacy.



**Fig. 4.** Health literacy builds upon information literacy, digital navigation skills and underlying literacy and numeracy.

Working as a partnership, particularly with CILIP, the professional body, maximises opportunities to work with special interest groups in librarianship. Notably, this has created opportunities to provide training on health literacy to prison librarians, who are sharing skills with prison staff and creating resources to support prisoners.

### Responding to COVID-19

With the COVID-19 pandemic, the national NHS knowledge and library services team took steps to avoid duplication and enable local NHS knowledge services to focus on local priorities (12). One initiative, introduced at pace in May 2020, was to curate reliable information resources on Coronavirus for specific patient

groups and in accessible formats, such as British Sign Language (13). There is a mandatory requirement for NHS organisations and NHS-funded social care to provide information in accessible formats (14), so health and social care staff need to be able to find trustworthy information including content in accessible formats. The team liaised with other national organisations within the NHS and identified that there was a need to bring this information together nationally in one place.

The online resource curated by HEE is a key channel to enable healthcare professionals and information providers in the community to find quality-assured, trustworthy information, in a variety of formats, that they can be confident to share with patients and carers. To save time and avoid repetition across the system, the national NHS knowledge and library services team re-prioritised the time of staff to identify authoritative sources. Working with a proactive stakeholder engagement lead within HEE to promote access to reliable Coronavirus information for health and care professionals has been invaluable. Specific promotion includes working with local authorities, who continue to provide services, notably in streets and public places, throughout the pandemic. Promotion is managed through communications teams in local NHS organisations, for links to local websites, the voluntary sector and social media, with tools including an animation (15).

The first sections developed were to meet the needs of people requiring information in accessible formats, alongside older people and children, as the groups most impacted at the start of the pandemic. New sections continue to be developed on specific conditions, Long Covid and vaccinations, in response to need and requests. As of October 2021, the site has had 154,000 page views since launch.

### Learning and next steps

Alongside the long-term approach of developing underlying health literacy awareness and skills, the team recognised that in a pandemic there is also an imperative to move quickly to bring together trustworthy information sources. There is a need to maintain the Coronavirus resources in parallel with working on longer-term partnership development.

Resources in development include Easy Read tools for



the public to use to improve their conversations with healthcare staff. The national team is also working with specific healthcare professional groups who work with the public in community settings, notably pharmacists. The initiative demonstrates the value of knowledge specialists collaborating with communications professionals. The Coronavirus information site (13) was shortlisted for a national Health Service Journal award in 2020 (16).

The need to access, assess and use high-quality health information will not go away as we move out of the pandemic. We will continue to develop partnerships and share learning to increase the skills of both the NHS workforce and members of the public, so that we enable everyone to find and use high-quality health information for current and future healthcare information needs.

*Submitted on invitation.*

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### REFERENCES

1. Health Education England. Our Work. [cited 22Oct.2021] Available from: <https://www.hee.nhs.uk/our-work>
2. Health Education England. NHS Library and Knowledge Services in England Policy. 2016. [cited 22Oct.2021] Available at: <https://www.hee.nhs.uk/sites/default/files/documents/NHS%20Library%20and%20Knowledge%20Services%20in%20England%20Policy.pdf>
3. Health Information and Library Services Directory. [cited 22Oct.2021] Available at: <https://www.hlisd.org/> Note: Directory covers all health information and library services across the UK, including those in the NHS in England.
4. Health Education England. Knowledge for Healthcare: Mobilising evidence; sharing knowledge; improving outcomes. A strategic framework for NHS knowledge and library services in England 2021-2021. 2021. [cited 22Oct.2021] Available at: <https://www.hee.nhs.uk/our-work/knowledge-for-healthcare>
5. Carlyle R, Goswami L, Robertson S. Increasing participation by National Health Service knowledge and library services staff in patient and public information: The role of Knowledge for Healthcare, 2014–2019. *Health Information and Libraries Journal*. [Early view]. 31July2021 [cited 22Oct.2021]. Available at: <https://doi.org/10.1111/hir.12388>
6. Rowlands G, Protheroe J, Winkey J, Richardson M, Seed PT, Rudd R. A mismatch between health literacy and the complexity of health information: an observational study. *British Journal of General Practice*. 2015;65(635):e379-e386 [cited 22Oct.2021] Available at: DOI: <https://doi.org/10.3399/bjgp15X685285>
7. Naughton J, Booth K, Elliott P, Evans M, Simoes M, Wilson S. Health literacy: the role of NHS library and knowledge services. *Health Information and Libraries Journal*. 2021;38(2):150-4. [cited 22Oct.2021] Available at: <https://doi.org/10.1111/hir.12371>
8. National Institute for Health and Care Excellence. Shared Decision Making Guideline. 2021. [cited 22Oct.2021] Available at: <https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-guidelines/shared-decision-making>
9. Health Education England and NHS Education for Scotland. Health Literacy [eLearning]. Updated 2021. [cited 22Oct.2021] Available at: <https://www.e-lfh.org.uk/programmes/healthliteracy/>
10. University of Southampton. Health Literacy [geodata]. [cited 22Oct.2021] Available at: <http://healthliteracy.geodata.uk/>
11. Department for Business Innovation and Skills. The 2011 Skills for Life Survey: A Survey of Literacy, Numeracy and ICT Levels in England. 2011. [cited 22Oct.2021] Available at: <https://www.gov.uk/government/publications/2011-skills-for-life-survey>
12. Edwards C, Reid L, Lacey Bryant S. Responding to COVID-19 in the National Health Service in England: positive changes and learning for Knowledge for Healthcare. *JEAHIL* [Internet]. 2Oct.2020 [cited 22Oct.2021];16(3):31-6. Available at: <http://ojs.eahil.eu/ojs/index.php/JEAHIL/article/view/420>

13. Health Education England. Coronavirus information for the public. [cited 22Oct.2021] Available at: <https://library.nhs.uk/coronavirus-resources/>
14. NHS England. Accessible Information Standard [updated 2017]. [cited 22Oct.2021] Available at: <https://www.england.nhs.uk/ourwork/accessibleinfo/>
15. Health Education England. Coronavirus information for patients and families: an NHS gateway for health and information workers. 2020. [Animation] [cited 22Oct2021] Available at: [https://www.youtube.com/watch?v=aWNSNTFn\\_kk](https://www.youtube.com/watch?v=aWNSNTFn_kk)
16. Health Service Journal. Awards shortlist. 2020. [cited 22 Oct.2021] Available at: <https://awards.hsj.co.uk/shortlist-2020>



# The relationship between fake news and fake medicines: how misinformation has fuelled the sale of COVID-19 substandard and falsified medical products

Oksana Pyzik (a,b,c), John Hertig (d), Hoda Kanso (b), Anika Chamba (b) and Sofia Khan (b)

a. UCL School of Pharmacy, University College London, UK

b. UCL Fight the Fakes, University College London, UK

c. Commonwealth Pharmacists Association, London, UK

d. Butler University College of Pharmacy and Health Sciences, Indianapolis, IN, USA

## Abstract

*As waves of COVID-19 continue to threaten public health, an increasing volume of disease-related information is widely accessible, and not all of it is accurate or reliable. The World Health Organisation (WHO) described this overabundance of information, misinformation, and disinformation as an "infodemic", making it difficult for many to distinguish fact from fiction. These definitions are complex and transitional; however, misinformation is defined as the "inadvertent sharing of false information", whereas disinformation is more sinister in origin and constitutes "the deliberate creation and sharing of information known to be false." The infodemic encapsulates both intentional and unintentional erroneous sources. Ultimately, the patient safety consequences remain the same, including amplifying vaccine hesitancy and propagating dangerous "coronavirus cures" myths, leading to higher COVID related mortality rates. Disinformation, desperation, and panic drive the production and sale of falsified medical products. The WHO estimates 1 in 10 medical products in low-and-middle-income countries (LMIC) settings are substandard or falsified (SF), which may worsen diseases, cause disability or even death. Ultimately, SF products undermine public trust in COVID-19 vaccines and treatments, all sectors must come together in this crisis to ensure quality COVID medical products are distributed safely and fairly to end the pandemic sooner rather than later.*

**Key words:** COVID-19; falsified medical products; infodemic; pandemic.

A parallel pandemic of misinformation has spread worldwide, faster than COVID-19 itself, and continues to outpace law enforcement and regulatory bodies as it grows exponentially online. The ultimate cost of misinformation is loss of life and even further deterioration of trust in health care systems and science. As waves of COVID-19 continue to threaten public health, an increasing volume of disease-related information is widely accessible, and not all of it is accurate or reliable. The World Health Organisation (WHO) described this overabundance of information, misinformation, and disinformation as an "infodemic",

making it difficult for many to distinguish fact from fiction. These definitions are complex and transitional; however, misinformation is defined as the "inadvertent sharing of false information", whereas disinformation is more sinister in origin and constitutes "the deliberate creation and sharing of information known to be false". The infodemic encapsulates both intentional and unintentional erroneous sources. Ultimately, the patient safety consequences remain the same, including amplifying vaccine hesitancy and propagating dangerous "coronavirus cures" myths, leading to higher COVID related mortality rates.

*Address for correspondence:* Oksana Pyzik, UCL School of Pharmacy, 29-39 Brunswick Square, Room 336 London, WC1N 1AX, UK. E-mail: o.pyzik@ucl.ac.uk.

Disinformation, desperation, and panic drive the production and sale of falsified medical products. The WHO estimates 1 in 10 medical products in low-and-middle-income countries (LMIC) settings are substandard or falsified (SF), which may worsen diseases, cause disability or even death (1). There is an essential distinction between the two definitions. Substandard medical products stem from poor manufacturing practices or supply chain gaps and can be described as “out of specification”. In contrast, falsified medical products encompass those that have a fraudulently misrepresented identity, composition or source. These products historically thrive on shortages and crises. Both are important but have different origins and solutions. The global burden of SF COVID-19 medical products is difficult to capture, but estimates surpass pre-covid projections. From organised criminal groups selling falsified vaccines on the black market to scammers peddling unproven alternatives to the vaccine online, both take advantage of fear, shortages, and mistrust to target vaccine-hesitant populations alongside regions without access for lucrative profits.

In July 2020, United Nations Office on Drug and Crime (UNODC) released a research brief on “COVID-19-related trafficking of medical products as a threat to public health” detailing emerging trends and how the COVID-19 crisis has opened a window of opportunity for organized criminal groups to exploit fearful populations, particularly those in various phases of lockdown or quarantine. The initial drug shortages caused by the crisis, misinformation and disinformation campaigns created ideal conditions for SF medicines to fill the online and offline gaps in demand. As a result, securing pharmaceutical supply chains and fighting disinformation has become a national security issue for countries seeking to control the flow of products into - and out of - their borders.

Sources of misinformation are varied and complex, ranging from troll farms flooding social media news feeds to the highest political office, as some leaders touted the effectiveness of hydroxychloroquine and chloroquine despite a lack of randomised clinical trials supporting their efficacy. Following the high-profile international media coverage of these claims, authorities in Cameroon seized falsified chloroquine from at least 300 pharmacies and hospitals in April 2020 (2). More recently, misinformation about the effectiveness of iver-

mectin to treat COVID-19 without evidence has been touted by celebrities and podcasters, in direct opposition to public health advice. Unprecedented publicity around such unlicensed products has led to extensive shortages, self-treatment, and overdoses, leading to patient safety issues and increasing the risk of substandard and falsified medical products entering all countries.

The rise of SF medical products alongside anti-science scams has led the UN to launch a "Verified" campaign to flag dubious sources and content on social media and traditional media outlets. The initiative provides science-backed content and urges the public to become "information volunteers" to help spread reliable information to combat the COVID-19 communication crisis. Overall, the campaign has reached 1 billion people in 130 countries, with approximately 300 million being reached via social media, thereby yielding a total of 70,000 "information volunteers" (3). However, more awareness and coordinated strategic action across public health, regulatory, and law enforcement domains are needed to specifically tackle the SF issue. The Fight the Fakes (FTF) Alliance is a multi-stakeholder, non-profit association that is wholly dedicated to addressing SF threats by raising global awareness in partnership with members and youth groups. UCL Fight the Fakes is the first academic chapter founded by Oksana Pyzik and aims to fill the current SF knowledge gap by connecting key actors to develop education and training programmes, disseminate research and increase awareness via social media campaigns globally. However, it is not feasible for any organisation to reduce SF alone and requires governments and public, private sectors to come together to fight the fakes, both fake medicines and "fake news."

Social media platforms and digital technology are the driving force that accelerates the speed of misinformation spread around COVID-19 medical products and the wider pandemic without sufficient regulation. A *BMJ* study by Li *et al.* published in May 2020 found that out of the most-watched COVID-19 related YouTube videos, 1 in 4 contains incorrect and unreliable information (4). As some social media sites have overtaken mainstream media within certain demographics it has become more challenging to debunk rumours and cultural stigmas with science-based guidance alone. The American Journal of Tropical

Medicine and Hygiene concluded that approximately 5,876 hospitalisations were attributable to COVID-19 related misinformation on online platforms during the pandemic, yielding 800 patient deaths reported globally. Reports of rumours that drinking concentrated methanol or bleach can kill the virus emerged across nations, subsequently causing 60 cases of total blindness, 30 deaths in Turkey and 12 instances of harm in India (5). In April 2020, this led to the WHO advising governments to enforce restrictions on access to and consumption of alcohol during lockdowns (6). On another occasion, falsified "coronavirus cures" in the United States (US) contained potassium thiocyanate and hydrogen peroxide, and users were instructed to rinse their mouths with these corrosive chemicals (7). Other instances of potentially harmful COVID-19 related misinformation include the consumption of cow urine to cure or prevent the virus. Overall, 2,311 reports of COVID-19 misinformation with serious consequences were identified, spanning over 87 countries globally, many more go unreported and unidentified (5).

Thus far, Operation STOP, a World Customs Organisation-led initiative supported by WHO, UNODC, INTERPOL, Europol and OLAF has reported 1,233 cases out of a total of 1,683 seizures and detentions by 51 Member States containing SF medicines and medical devices. In the UK over 307,215,524 items of illicit medicines valued at £9 million have been seized or detained via Operation Pangea (1). To counter this the UK's Medicines and Healthcare products Regulatory Agency (MHRA) has launched its own #FakeMeds campaign to educate the public on registered seller marks and verification logos, as well as use of the yellow card scheme to report suspected falsified medical products.

Chaotic and slow responses by some Governments heightened global bidding wars for Personal Protective Equipment (PPE), vaccines, treatments and therapeutics further exacerbating covid inequities that criminals capitalized on for example, in Pune, India, four people were arrested in May 2021 for selling fake vials of Remdesivir for Rs. 35,000, far above the official Rs. 2,000 (\$27) price cap for the genuine medicine. Counterfeiters deceive people simply by replicating the product packaging, while filling with inactive or even harmful contents inside the vial/packing.

The pandemic disrupted and delayed pharmaceutical supply chains worldwide, creating new access points for falsified medicines to reach patients through illegal online channels. According to the Alliance for Safe Online Pharmacies (buysaferx.pharmacy), within weeks of the WHO declaring the COVID-19 pandemic, 100,000 new domain names were registered to contain the terms: "covid," "corona", or "virus." Of these, 122 names also had the string "vaccine", and over 400 contained the string "test." Although some could be considered legitimate, the vast majority were operated by criminals taking advantage of fear and uncertainty, spreading misinformation and harming the public by selling SF products globally.

The infodemic and pervasive use of the internet make SF COVID-19 products widely accessible to higher-income countries. According to NABP (2020), the Rogue Rx Activity Report (2020) identified dozens of illegal online pharmacies run by well-known criminal networks actively marketing prescription-only COVID-19 treatments, primarily chloroquine hydroxychloroquine, azithromycin, and lopinavir/ritonavir. One recent study published in the US found 35.9% of respondents bought COVID-19 medicines or vaccines via the internet and social media sites. The public's false confidence in these sources of medicines has the potential to lead to exponential patient harm. Although online drug sellers target higher-income countries, these problems are not limited to more resourced jurisdictions.

Historically, lower-income countries suffer disproportionately from SF products due to fractured supply chains and resource constraints within health care and regulatory systems. Currently, Africa has the slowest vaccination rate of any continent, with just 12.2 percent of the population receiving at least one dose of a vaccine. The vaccine equity gap will continue to prolong the pandemic in LMICs and breed new variants e.g., Omicron, that will affect vaccine efficacy and progress made in high-income countries (HIC) (8). The trickle-down vaccine donation policy has failed to protect vulnerable populations and health workers in LMICs, with some turning to unlicensed vendors to fulfil unmet needs. The WHO has warned that the vaccine equity gap will continue to be exploited by organised criminal groups for profit as they pivot from PPE and diagnostics towards vaccines. International coop-

eration and political will to expand access to life-saving vaccines are needed to upscale the fight against SF medical products. The Access to the COVID-19 Tools Accelerator was envisioned as a multi-organisation effort to ensure all populations had access to critical diagnostics, therapeutics and especially vaccines through the COVAX financing facility. As of July 2021, 12.9 billion doses of the vaccine were administered globally, with only 2% (270.2 million) of the doses in Low-Income-Countries (9).

The United Nations Office on Drugs and Crime (UNODC) has reported a five-fold increase in cyber-crime (10). While all countries are vulnerable to poor quality and falsified medical products, HIC primarily sees this issue manifest in the illegal sale of medicines online through illegal online "pharmacies" and even social media platforms. Law enforcement agencies have shut down over 2,500 illicit websites advertising falsified items associated with COVID-19, including diagnostic tests and the most commonly falsified item, "corona spray." The authorities also seized over 34,000 falsified face masks despite only 2-10% of all cargo containers undergoing border control inspection (11). The true figure of falsified medical products is likely to be much larger but is silently slipping through porous borders. These illegitimate products may be contaminated, toxic or instil a false sense of security, leading some to take more risks.

In the UK, the MHRA has issued warnings regarding a rise in unauthorised testing kits and medications such as antivirals listed on eBay, leading to arrests however, as soon as one seller is removed another pops up in its place creating a whack-a-mole problem (12, 13). In the US, American's preference for buying medicine via the internet has increased since 2017 (33% to 36% in 2020) and 7 in 10 Americans erroneously believe that if an online pharmacy website appears high up in a search engine search, it is likely to be legitimate. Thus, to tackle the growing issue of the online sale of falsified medical products, the registration of online pharmacy domain names is vital. This simple yet effective step is necessary for tackling at least one aspect of this multi-front war against fake medical products.

Lessons from the early global response to the pandemic demonstrate the continued importance of solidarity, transparency and cooperation to protect populations and economies, and the high price coun-

tries have paid in failing to adhere to these principles that unite nations. More specifically, in relation to curbing SF medical products, further strategic coordination is needed across the private sector and Big Tech with governmental bodies to tackle the COVID-19 "infodemic" and provide safe and reliable information to the public in real time. However, at the core of the SF issue remains access to efficacious, affordable and quality life-saving medicines, a fundamental human right. The fight against SF medicines and medical products protects good-health and well-being in line with SDG 3 but will also promote further development goals such as SDG 10 "Reduced Inequalities", SDG 16 "Peace, Justice and Strong Institutions", and SDG 17 "Partnership for the goals".

Ultimately, SF products undermine public trust in COVID-19 vaccines and treatments, all sectors must come together in this crisis to ensure quality covid medical products are distributed safely and fairly to end the pandemic sooner rather than later.

*Submitted on invitation.*

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## REFERENCES

1. World Health Organisation. 1 in 10 medical products in developing countries is substandard or falsified [Internet]. 2017 Nov 28 [cited 2021 Nov 16]. Available from: <https://www.who.int/news/item/28-11-2017-1-in-10-medical-products-in-developing-countries-is-substandard-or-falsified>
2. VOA News. Cameroon Seizes Fake Coronavirus Drugs Sold by Scammers. [Internet]. 2021 April 03. [cited 2021 Nov 16]. Available from: [https://www.voanews.com/a/science-health\\_coronavirus-outbreak\\_cameroon-seizes-fake-coronavirus-drugs-sold-scammers/6186908.html](https://www.voanews.com/a/science-health_coronavirus-outbreak_cameroon-seizes-fake-coronavirus-drugs-sold-scammers/6186908.html)
3. United Nations Secretary Council. Fighting misinformation on COVID-19 by flooding the internet with science, solutions and solidarity [Internet]. [cited 2021 Nov 16] Available from:

- [https://www.purpose.com/case\\_studies/verified/](https://www.purpose.com/case_studies/verified/)
4. BMJ. Misleading information in 1 in 4 most viewed YouTube COVID-19 videos in English [Internet]. 2020 May 13 [cited 2021 Nov 16]. Available from: <https://www.bmj.com/company/newsroom/misleading-information-in-1-in-4-most-viewed-youtube-covid-19-videos-in-english/>
  5. Islam, MS; Sarkar, T; Khan, SH; Kamal, AM; Hasan, SMM; Kabir, A; Yeasmin, D; Islam, MA; Chowdhury, KIA; Anwar, KS; Chughtai, AA; Seale, H. COVID-19-Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis. *ASTMH*. 2020 Aug; 104(4):1621-9.
  6. World Health Organisation. Alcohol does not protect against COVID-19; access should be restricted during lockdown [Internet]. 2020 Apr 14 [cited 2021 Nov 16]. Available from: <https://www.euro.who.int/en/health-topics/disease-prevention/alcohol-use/news/news/2020/04/alcohol-does-not-protect-against-covid-19-access-should-be-restricted-during-lockdown>
  7. Pharmafile. British man charged in the US for smuggling phoney coronavirus cure [Internet]. 2020 Apr 3 [cited 2021 Nov 16]. Available from: <http://www.pharmafile.com/news/545495/british-man-charged-us-smuggling-phoney-coronavirus-cure>
  8. World Health Organisation. Director-General's opening remarks at the media briefing on COVID-19 – 9 April 2021 [Internet]. 2021 Apr 9 [cited 2021 Nov 16] Available from: <https://www.who.int/director-general/speeches/detail/director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-9-april-2021>
  9. <https://launchandscalefaster.org/How%20can%20LMIC%20countries%20prepare>
  10. United Nations Office on Drugs and Crime. CYBERCRIME AND COVID19: Risks and Responses [Internet]. 2020 Apr 14 [cited 2021 Nov 16] Available from: [https://www.unodc.org/documents/Advocacy-Section/UNODC\\_-\\_CYBERCRIME\\_AND\\_COVID19\\_-\\_Risks\\_and\\_Responses\\_v1.2\\_-\\_14-04-2020\\_-\\_CMLS-COVID19-CYBER1\\_-\\_UNCLASSIFIED\\_BRANDED.pdf](https://www.unodc.org/documents/Advocacy-Section/UNODC_-_CYBERCRIME_AND_COVID19_-_Risks_and_Responses_v1.2_-_14-04-2020_-_CMLS-COVID19-CYBER1_-_UNCLASSIFIED_BRANDED.pdf)
  11. Interpol. Coronavirus outbreak sparks a new trend in counterfeit medical items [Internet]. 2020 Mar 19 [cited 2021 Nov 16]. Available from: <https://www.interpol.int/en/News-and-Events/News/2020/Global-operation-sees-a-rise-in-fake-medical-products-related-to-COVID-19>
  12. The Guardian. Two arrested for illegally selling Covid-19 home testing kits [Internet]. 2020 Apr 15 [cited 2021 Nov 16]. Available from: <https://www.theguardian.com/uk-news/2020/apr/15/two-arrested-for-illegally-selling-covid-19-home-testing-kits>
  13. Studman, Anna. Watch out for fake coronavirus medicines and dodgy health advice [Internet]. 2020 Apr 9 [cited 2021 Nov 16]. Available from: <https://www.which.co.uk/news/2020/04/beware-dodgy-coronavirus-health-advice-and-fake-cures/>

### Letter from the President



**Lotta Haglund**

Swedish School of Sport and Health Sciences, GIH  
Stockholm, Sweden  
Contact: [lotta.haglund@gih.se](mailto:lotta.haglund@gih.se)

Dear EAHIL Colleagues,

With just a few days left of 2021, we can look forward to an exciting 2022 for EAHIL. First and foremost, our first in-person event since 2019. The Local Organising Committee and International Programme Committee, led by Wichor Bramer and Hans Ket, are working hard to make the event in Rotterdam in June a memorable experience. Even though we all long for social networking, no EAHIL event will happen without the professional contributions from all of you in terms of posters, oral presentations and continuing education courses. The inspiring overall theme for the conference is **BROADEN THE HORIZONS** - diversity, partnership, and innovation with a human touch, with six subthemes. Please check the call for abstracts at <https://eahil2022.nl/> and consider submitting your abstract! And don't forget to apply for a scholarship to attend the conference.

In connection to the preparations for the Rotterdam conference, the question of a Code of conduct for the event has been raised. EAHIL has a Code of Ethics for members (available on our website), approved by the General Assembly in Köln in 2002. The Board has now initiated work on updating this, looking to add diversity and sustainability etc.

Every second year is an election year for EAHIL. This means that in spring 2022, there will be an election for the Board, this time with four open positions: President (2023-2024), one full member (2023-2026) and two co-opted members (2023-2024). Information about the election process will be forthcoming, but it's not too early to start thinking about who you'd like to see on the Board for the coming 2-4 years. Perhaps it is your contribution we need!

During the past months, our member database administrators have been working to clean and update the database. It turns out that there are a considerable number of outdated e-mail addresses on record, which means that we're unable to reach those members. We've also engaged the Council members to help us contact members in their country. Despite all efforts, there are still be several outdated records in the database. These records will be deleted by 1 December to make sure we have an up-to-date database. If your record has been deleted, you will have to apply for membership again on the EAHIL website.

We can also establish the fact that e-mails are a mixed blessing. It's an easy way of communication but has its drawbacks, like overflowing inboxes and spam e-mails. One of the more severe downsides is the increase in phishing attempts. Recently, there have been many phishing e-mails to EAHIL members, looking like they were sent by me and asking for urgent help in an EAHIL (financial) matter. Please be cautious and check the sending e-mail address before replying, or double-check with me if you're not sure. Please note that I would never e-mail an EAHIL member asking for this kind of assistance.

With wishes for a happy and healthy 2022!



# Introduction to the Evidence-Based Information Group and report on activities to date

**Jane Falconer (a), Thomas Vandendriessche (b), Krizia Tuand (c) and Shona Kirtley (d)**

(a) Library Archive & Open Research Services, London School of Hygiene & Tropical Medicine, London, UK jane.falconer@lshtm.ac.uk (Co-chair)

(b) KU Leuven Libraries – 2Bergen, Leuven, Belgium thomas.vandendriessche@kuleuven.be (Co-chair)

(c) KU Leuven Libraries – 2Bergen – Learning Centre Désiré Collen, Leuven, Belgium Krizia.Tuand@kuleuven.be (Co-secretary)

(d) UK EQUATOR Centre, Centre for Statistics in Medicine, Nuffield Department of Orthopaedics, Rheumatology & Musculoskeletal Sciences, University of Oxford, Oxford, UK shona.kirtley@csm.ox.ac.uk (Co-secretary)

## Introduction

The idea of creating an Evidence-Based Information SIG (EBI-SIG) saw the light at EAHIL 2018 in Cardiff. The idea was further developed by Marshall Dozier, Alicia Fátima-Gómez, Krizia Tuand and Thomas Vandendriessche and the SIG was finally formed after an open meeting of all interested EAHIL members at the 2019 EAHIL Workshop in Basel. The main aim of the group is to bring together and connect all EAHIL members who are interested and want to improve the quality of systematic reviews and other evidence-based products. We aim to do this by supporting five main areas of activity:

1. to support knowledge exchange by providing a space to discuss problems and share information, experiences and best practice;
2. to provide and support continuing professional development for health librarians and researchers on topics related to systematic reviews and other evidence-based products;
3. to appeal to the publishers and editors of medical journals to consider the quality of systematic reviews and include better guidelines about methodological and reporting issues, also to advocate for the inclusion of biomedical librarians as editors in the peer-review process;
4. to develop strategies to improve the visibility of systematic reviews and other evidence-based products;
5. to connect with other interest groups or projects and support the dissemination of international standards.

After an open call of the EAHIL membership for nominations to co-chair and co-secretary posts, the elections of Jane Falconer and Thomas Vandendriessche as co-chairs and Krizia Tuand as secretary were made unopposed. Shona Kirtley joined as co-secretary in 2021.

The co-chairs agreed to encourage EBI-SIG members to become involved by putting out a call for relevant projects. The projects would be led by a SIG member, with support from the co-chairs. The projects could be on any topic relevant to the aims of the SIG.

The Evidence-Based Information SIG currently has 249 members.

Please consult the EBI-SIG webpage for more information <http://eahil.eu/sig-2/evidence-based-information-group/>.

## NEWS FROM EAHIL SPECIAL INTEREST GROUP

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### Meeting with sister organisations, 2 September 2020 (online via Zoom)

An introductory meeting was arranged with representatives of the International Federation of Library Associations and Institutions (IFLA), the Australian Library & Information Association (ALIA), the Canadian Health Libraries Association (CHLA), the Association for Health Information and Libraries in Africa (AHILA) and the Medical Library Association (MLA). Apologies were received from representatives of AHILA and MLA.

The meeting started with introductions of individuals and organisations and this was followed by an open discussion of potential areas for collaboration.

#### *Peer-review of systematic search strategies*

The discussion started with the joint letter to the International Committee of Medical Journal Editors, calling for journal editors to be proactive in using the skills of information professionals for methodological peer-review (1). Unfortunately, none of the attending signatories had received any feedback.

It was agreed that peer-review of search strategies could have potential to be an area of collaboration through sharing support, resources and skills development opportunities.

#### *Advocating for health information professional skills*

Several attendees shared details of local efforts to advocate for further acknowledgement of information professional's skills and of the skills required of a systematic searcher.

The meeting ended with an agreement to continue the meetings and work together on common issues.

### EBI-SIG meeting, 17 November 2020, 17th EAHIL Conference, Łódź, Poland (online via Zoom)

The first EBI-SIG meeting attracted 21 attendees as well as the EBI-SIG co-chairs and secretary.

As this was the first meeting of the group, time was allocated to allow each attendee to give a brief summary of their relevant experience and reason for interest in the EBI-SIG.

Jane Falconer provided a summary of the sister organisations meeting.

The leads of two SIG projects gave an overview of their project and progress to date. These were:

1. peer reviewing search strategies for journals, Krizia Tuand. This project links to a number of the SIG aims and focuses on peer-review of search strategies upon submission to a journal;
2. reference database of relevant methodology articles, Marshall Dozier. This project aims to provide a shared database of relevant articles on systematic search methodology.

A call was also put out for more volunteers to work on these projects or to put forward other areas of work.

### EBI-SIG meeting, 6 July 2021, EAHIL Virtual Workshop, Istanbul, Turkey (online via Zoom)

The second EBI-SIG meeting attracted 31 attendees, including the co-chair Thomas Vandendriessche and the secretary Krizia Tuand. Jane Falconer (co-chair) was excused.

Time was taken to give an overview of the listed SIG projects. Although there hadn't been much progress, due to COVID-19, there was a lot of enthusiasm and input by the attendees. The main aim for the upcoming year

is to reboot the projects and start hosting webinars and journal clubs with regular intervals, linked to these SIG projects. These events will be communicated via the SIG mailing list.

You can find some pitched ideas in the [SIG meeting minutes](#).

Furthermore, it was mentioned to keep an eye out for an updated Cochrane handbook and supplement and for the start-up of a search strategy repository, sponsored by CABI (<https://searchrxiv.org/>).

Lastly, a call was made that we as professionals should spread more light on the things we're doing during this pandemic and take these circumstances as a motor to raise awareness on evidence-based information.

### **EBI-SIG project meeting, 19 October 2021 (online via Zoom)**

This project meeting was arranged to bring all EBI-SIG project leads and contributors together to provide updates on each project and to start to move the projects forward. Seven projects had been previously initiated and an update was provided on each:

Project 1 - Mapping journal requirements for systematic reviews;

Project 2 - Reference database on articles about systematic search methods;

Project 3 - Make a list of people for peer-reviewing search strategies for journals. And/or coordinate the joining of existing lists. Combined with training for peer-review;

Project 4 - Worldwide database for search strategies (Which ones exist, is there need for extra or centralisation?);

Project 5 - Visibility of evidence-based reports (HTA reports, commissioned reports, etc.);

Project 6 - Collaboration and sharing: Contact international sister organisations and other networks and map opportunities;

Project 7 - Tools in R for health libraries.

The projects are all at varying stages, with some having made substantial progress and others still at an early stage or not yet having begun. A number of excellent ideas were proposed to assist in moving projects forward or to redefine the initial focus or objectives of projects to enable them to get underway.

The general consensus was that more leads and contributors are required to help to drive the projects forward. Any member of the SIG can be involved so please do consider volunteering for a project! Details of the current projects list and the project leads are on the [SIG webpage](#).

### **REFERENCE**

1. Traditi LK. MLA recommends seeking information specialists as peer reviewers for knowledge synthesis publications. *MLA Connect*. 10 June 2020. Available from: <https://www.mlanet.org/p/cm/ld/fid=1122&&blogaid=3029> [Accessed 5 November 2021]

## National Library of Medicine Update for the Journal of EAHIL



**Dianne Babski**

Associate Director, Library Operations  
National Library of Medicine, National Institutes of Health,  
US Department of Health and Human Services  
dianne.babski@nih.gov

### Product updates

At the National Library of Medicine (NLM), we serve many different stakeholders in both public and private sectors across the globe. We are committed and focused on meeting the evolving needs of this broad and diverse range of stakeholders. As such, we continuously seek feedback to ensure we are growing to meet current and future user needs. Our focus is to ensure our products are unique, high-quality, and trusted resources. We strive to build functionality into our interfaces and systems that allow our users to customize, repurpose, and share our resources. With that in mind, I'd like to share a few updates from a cross section of NLM products and services:



*Sphere of NLM Product Stakeholders*

**DOCLINE:** Over 2,000 users utilize DOCLINE services daily. In addition, the libraries place over 2,000 requests per day. The updated DOCLINE system maintains popular features and incorporates user-requested enhancements related to journal holdings updates, reporting and documentation. We continue to develop DOCLINE by adding features and functionality based on feedback to meet users' feedback.

**MEDLINE 2022 Initiative:** As part of our efforts to transform and accelerate biomedical discovery and improve health and health care, we are transitioning to automated Medical Subject Headings (MeSH) indexing of MEDLINE citations in PubMed. Automated indexing will provide users with timely access to MeSH indexed metadata and allow us to scale indexing for MEDLINE to the volume of published biomedical literature. Our human indexers will continue to be involved in the refinement of automated indexing algorithms and will play a significant role in the quality assurance approaches for automated indexing.

**PubMed Central Labs (PMC):** Our PubMed Central Team is modernizing the PMC user interface. I encourage you to visit our development site, PMC Labs (<https://www.ncbi.nlm.nih.gov/labs/pmc/>), to test drive updates which include a search bar to locate full text articles, reorganized and reformatted documentation, and modernized article display that optimizes the reader experience. The goal is to enhance our users' experience by creating a cohesive design between PMC and PubMed.

**Clinical Trials.gov:** We have also launched an effort to modernize ClinicalTrials.gov. The goal with this redesign is to deliver an improved user experience on an updated platform that will accommodate growth and enhance efficiency. We are working to ensure that clinical trial information is current, complete, and reliable, that all users can easily find and use information about clinical trials, and clinical trial information,

resources, and tools provide value to the research ecosystem. We expect to launch the beta version of the new site in parallel with the current ClinicalTrials.gov later this year.

**Comparative Genomics Resource (CGR):** To improve comparative genomic analyses and accelerate new discoveries, we are developing a new system to archive, annotate, and compare genomics-related data for eukaryotic organisms. This will support research to explore fundamental biological processes underpinning human health by providing the functionality to compare the genomic features of different organisms. We are very excited about the potential of this new product!

### Taking action

Although the COVID-19 pandemic has taken center stage over the past twenty months, I would also like to call your attention to key initiatives across the National Institutes of Health (NIH) that promote our efforts to bring health and hope to all people.

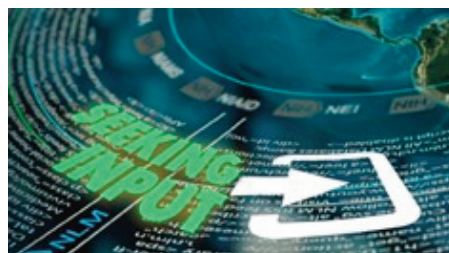
**The UNITE Initiative** was launched in March 2021 and provides a framework to identify, address, and combat factors that contribute to structural racism within the NIH-supported and the greater scientific community. This effort aims to incorporate the diverse perspectives and expertise that exist across NIH and the greater global research community. Each letter in UNITE represents a specific area for developing plans, resources, and accountabilities:



*UNITE Initiative*

- Understanding stakeholder experiences through listening and learning
- New research on health disparities, minority health, and health equity
- Improving the NIH culture and structure for equity, inclusion and excellence
- Transparency, communication, and accountability with our internal and external stakeholders
- Extramural research ecosystem: changing policy, culture and structure to promote workforce diversity

**Advance Research Project Agency for Health:** As demonstrated by the swift development of the COVID-19 vaccine, a new Division, Advance Research Project Agency for Health (ARPA-H), has been proposed for the NIH. ARPA-H aims to design break-through technologies, platforms, capabilities, and solutions that are transformative for medicine and health. ARPA-H would focus on time-limited projects with goals, benchmarks, and accountability to revolutionize how we prevent, treat, or cure a range of diseases, including cancer. Dr. Francis Collins, NIH Director, stated that ARPA-H would provide NIH with authorities that would allow us to be able to move even more quickly and to take more risks the way that DARPA has done for defense over the course of decades.



*Send us Your Feedback*

### Seeking Input

NLM, both as a national library and one of the 27 institutes that make up the National Institutes of Health, aims to work in partnership with our users and seek to keep you informed. I encourage you to stay up-to-date by subscribing to NLM's Technical Bulletin, or connect with us on our social media sites. We look forward to hearing from you, our library stakeholders, on what works and how can we improve our products? Use our customer service portal to provide feedback. We strive to make our products and services better and genuinely appreciate your feedback and support.

# US Medical Library Association report for EAHIL



**Carol Lefebvre**

MLA Representative to EAHIL  
Independent Information Consultant  
Lefebvre Associates Ltd, Oxford, UK  
Contact: [Carol@LefebvreAssociates.org](mailto:Carol@LefebvreAssociates.org)

### Update on MLA '22 – hybrid conference – virtual and in New Orleans

**Still time to submit abstracts** for posters and lightning talks (deadline 26 January 2022)  
- see below.

For the third year in row, MLA are holding their annual conference virtually but this year they are planning to hold it as a hybrid event, with the in-person event planned for New Orleans. If all goes according to plan, this will be the fifth time that MLA has been held in New Orleans, the first time being in 1931 and the last time being in 1988, so I think it is fair to say that it is time that it returned there.

<https://www.mlanet.org/mla22>

I do, however, feel that it would be irresponsible of me to try to persuade you to plan to travel to attend MLA '22 in person with the current COVID-19 situation but do, please, consider attending the conference virtually this year. You may again this year have conference funds in your budgets that you have been unable to spend on attending conferences in person, so, do, please, consider using those funds to register for the MLA conference as a virtual attendee. The registration fee for virtual attendance for EAHIL members (under an arrangement between EAHIL and MLA) is the same as for MLA members, i.e. 340 USD.

<https://www.mlanet.org/p/cm/ld/fid=1910>

The dates for the in-person event are 4-6 May 2022, with the virtual event starting on 27 April 2022.

The virtual conference held in 2021 attracted 1,200 attendees, with 100 papers, 50 lightning talks, 100 posters, 20 immersion sessions and 20 exhibitor sessions and the feedback was generally very positive.



**Posters and lightning talks** – abstracts can still be submitted until the deadline of 26 January 2022. Acceptance notices for posters and lightning talks will be sent on 21 February 2022.

**Keynote papers** - MLA have announced two keynote presentations for the conference.

The 2022 John P. McGovern Lecture will be given by Dr Mona Hanna-Attisha, a paediatrician and public health advocate whose research exposed the Flint (Michigan, US) water crisis (2014-2019). Her research revealed that children were exposed to dangerous levels of lead and she led subsequent recovery efforts there.

[https://en.wikipedia.org/wiki/Mona\\_Hanna-Attisha](https://en.wikipedia.org/wiki/Mona_Hanna-Attisha)

[https://en.wikipedia.org/wiki/Flint\\_water\\_crisis](https://en.wikipedia.org/wiki/Flint_water_crisis)

The 2022 Janet Doe Lecture will be given by Michael Kronenfeld. Michael is a well-known medical librarian and in March 2021, his book, *A History of Medical Libraries and Medical Librarianship: From John Shaw Billings to the Digital Era*, was published as part of MLA's book publishing programme. His lecture will primarily be based on this research.

**Contributed papers and lightning talks** - with respect to the contributed programme, there will be papers and lightning talks. The contributed papers are c. 10 to 15-minute presentations whereas the lightning talks are five-minute presentations and focus on one main topic, submitted as either a research abstract or a programme description abstract.

**Immersion sessions** - this year there will again be Immersion sessions, described as follows. "They are intended to: provide an in-depth perspective on areas of interest to MLA members. They are your chance to design and offer the programming that you want to see. Immersion sessions should strive for excellent engagement and can vary in format from a panel of invited speakers to a single invited speaker, a facilitated book discussion, as well as less-conventional sessions like an "unconference" or flipped session. The only type of programming excluded from immersion sessions are paper presentations." These were an innovation in the 2019 MLA programme. These sessions run for c. 75 minutes and are likely to be held in-person only.

**Exhibitor presentations** are being planned, both in-person and virtually.

**Continuing education courses**, which used to be held during the two days prior to the conference, will not be held again this year. MLA, however, continues its programme of continuing education, available as both live and recorded events.

<https://www.mlanet.org/p/cm/ld/fid=412>

**Exhibition** - the exhibition will also be in-person and virtual this year and c. 30 vendors have already confirmed exhibition space and others will attend virtually.

**Preliminary programme** – the preliminary programme will be made available shortly on the conference website.

**Networking events** will be offered both in-person and virtually, and more information will follow on the conference website.

## NEWS FROM US MLA

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**Conference registration** is not yet open. There is a discount for EAHIL members through EAHIL's association with MLA. The virtual only conference registration fee for EAHIL members is 340 USD, reduced from 690 USD for the in-person event in New Orleans.

<https://www.mlanet.org/p/cm/ld/fid=1910>

**The MLA '22 blog** provides coverage of a range of topics including programme sessions, plenary sessions, exhibition activity and virtual social events, before, during and after the meeting. A recent blog is entitled: How Does MLA Choose the Annual Conference Location? and makes fascinating reading with respect to their statement that MLA only meets in locations that do not by law discriminate against individuals due to race, colour, religion, sex, national origin, disability, or sexual orientation.

<https://www.mlanet.org/p/bl/et/blogid=158>

<https://www.mlanet.org/blog/how-does-mla-choose-the-annual-conference-location>

**Social media** - additionally, you can follow the meeting on Twitter with the MLA '22 hashtag #MLANET22 and follow MLA more generally on Facebook at: <https://www.facebook.com/MedicalLibraryAssn>

**Future MLA annual meetings** - dates for your diary:

Virtual Conference and Exhibits (subject to change) May 2023

Portland, Oregon 18-21 May 2024

### Membership of MLA

MLA offers international membership to individuals at a reduced rate. This category applies if you work or have worked in a health- or health information-related environment and live outside the US or Canada. The current annual subscription rate for International membership is 150 USD (or 25 USD if you are from an HINARI-eligible Group a or Group B country).

<https://www.mlanet.org/join>

### News and publications from MLA

The latest issue of the Journal of the Medical Library Association (JMLA) (Volume 109 (4) October 2021) is now available (open access) at:

<https://www.ncbi.nlm.nih.gov/pmc/journals/93/latest/>

Open access to back issues of the JMLA (and its predecessors back to 1898) is available from:

<https://www.ncbi.nlm.nih.gov/pmc/journals/93/>

Preprints of articles from the forthcoming issue of the JMLA are no longer available. JMLA does, however, encourage self-archiving at any point in the manuscript preparation or peer review process:

<http://jmla.mlanet.org/ojs/jmla/article/view/877>

MLAConnect provides electronic content for both MLA members and non-members. It provides access to content including from blogs of MLA caucuses (previously known as sections) and is updated continually. Most articles are restricted to MLA members and/or to members of specific MLA caucuses. For the most complete display of articles, you need to login with your username and password. Older issues of MLA News are also available.

<https://www.mlanet.org/mlaconnect>

<https://www.mlanet.org/page/mla-news>





### Publications and new products

Letizia Sampaolo

Istituto Superiore di Sanità, Rome, Italy

letizia.sampaolo@iss.it

Dear friends,

*are you in the right mood for some humour? The pandemic has led us all to live hard times, although our instinct is to go beyond the vision of a dark future, no matter what. It's true. We need to and are forced to be grounded, and balanced, and realistic, and responsible. Ok, but please, now and then, let's not forget to smile. Enjoy the story!*

*One night, at a very late hour, our friend Jack was in a great hurry, so he decided to take a shortcut through the local cemetery. While walking through it, he heard a tapping sound that scared him and made him quicken his pace, and as the cemetery's exit approached, the tapping got louder and louder. Jack was scared to death. Though, in a scenario that was suddenly reassuring, he saw a man that was chiselling a tombstone. In great relief, Jack addressed to the man: "Thank goodness! Your tapping gave me the fright of my life! You're busy, aren't ya ... By the way, why are you working so late?" The man grumped. "Can't you see, man? They spelt my name wrong!"*

#### JOURNAL ISSUES

*Health Information and Libraries Journal*: Contents of December 2021 (38:4)

#### Editorial

- **The visual abstract: A social media fad or the future of dissemination.**  
Angela Castellanos and Charlie M. Wray

#### Review

- **The impact of health information management professionals on patient safety: a systematic review.**  
Trixie Kemp, Kerrynt Butler-Henderson, Penny Allen and Jennifer Ayton

#### Original Articles

- **Visual abstracts do not increase some impact scores more than conventional abstracts of clinical research: a retrospective cohort study.**  
Vaibhav Aggarwal
- **Library and knowledge staff in England share similar perceptions of the roles and personal characteristics of the clinical librarian.**  
Sarah Rudd and Sam Harding
- **Regional and rural allied health professionals in Australia need better information services training and support for evidence-based practice.**  
Jacqueline Lienesch, Kylie Ann Murphy, Tracey Parnell and Adele Miles

## PUBLICATIONS AND NEW PRODUCTS

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- **Mental health clinicians' views of summary and systematic review utility in evidence-based practice.**  
Rachel Steele

### Regular Features

- ***Dissertations into Practice***  
**Library research support services in China's Universities of Traditional Medicine: understanding user requirements.**  
Yihang Chen and Lihong Zho
- ***International Perspectives and Initiatives***  
**Global trends in health science libraries: part 1.**  
Jeannette Murphy
- ***Teaching and Learning in Action***  
**Search Club, using peer support to develop search skills and share knowledge in a specialist NHS team.**  
Katie Nicholas, Emily Hopkins, Liz Jordan, Jo McCrossan, Matt Hunt and Katy Greenfield

### Miscellaneous

**Forthcoming Papers**  
**Acknowledgements**

### FROM THE WEB

- **The Internet Archive - The way we were**  
Now and then, governments, historians, politicians, personalities try to let history dissolve or tell it as they prefer to see it. We all know it is crucial to learn from the past and never leave behind a single thing. History made possible what we are today.

This is why recordings are so important. We have already talked about the [Wayback Machine](#) project and the [Internet Archive](#), a non-profit library of millions of free books, movies, software, music, websites, and more, that this year turns 25. The Wayback Machine is a key resource in the fight against disinformation, as it preserves history by unfolding and keeping track of who's saying what and when—notably, all without charging for access, selling user data, or running ads. It may help capture a web page as it appears now for use as a trusted citation in the future.

Led by my curiosity, I wondered if I could meet the first-ever [EAHIL website's](#) published page again, so I tried to. Well, it was moving to see the way we were and the many millions of miles EAHIL has walked ahead from February 2nd, 1999.

The Internet Archive, which runs the Wayback Machine project, relies on the generosity of individuals to help keep the record straight. Brewster Kahle, the founder, is spreading a message to ask for help. They have a 2-to-1 Matching Gift Campaign, tripling the impact of every donation. Therefore, if you find all these bits and bytes useful, it could be a good thing to lend a hand.



- **EBLIDA Newsletter Special Issue on Open Access and Copyright Strategies in Public Libraries**  
The European Bureau of Library, Information and Documentation Associations (EBLIDA) Newsletter is published monthly on European library & information society issues, programmes, news and events of interest to the library, archive and cultural heritage community.

A special issue was published – No. 10 October 2021 – entirely dedicated to open access and copyright strategies. Besides the Editorial that considers the complicated strategies that lie behind the rules, the issue offers views and articles on:



- Authorship in scholarly communication and the book trade
- Free access to information through open access and new policy challenges in research libraries
- Free access to information and sustainable copyright in public libraries: essential differences between scholarly communication and the book trade
- Which copyright strategy for public libraries? A combination of licences and open access policies
- Public Library Acquisition Policies, Open Access and related Copyright Strategies – A policy paper - soon to be released

Take a look at the [full issue!](#)

- **The 29th EBLIDA Annual Conference recorded and available online**

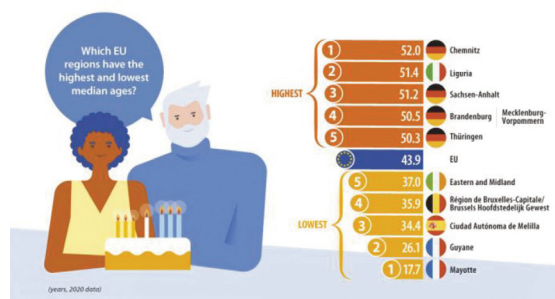
The recording of the 29th EBLIDA Annual Conference “European Structural Funds and Libraries, the win-win approach” held last June 11th, 2021, [is available](#) on YouTube.

The main objectives were:

- To inform EBLIDA Members and the general community of librarians of the TTU strategy and the activities having been ignited by EBLIDA’s work;
- To share ESIF-based best practices and SDG-oriented activities in libraries;
- To inspire similar projects and practices in European libraries, both at national and local levels and connect them to the EU level;
- In the long term, to raise the status of libraries and make them structurally relevant within the 2030 European agenda on sustainable development.

- **Are you younger or older than the median age in your region?**

For the very few among you who never needed to know [Eurostat](#), we will say it is the statistical office of the European Union. Their mission is to provide high-quality statistics and data on Europe, according to fundamental values such as respect for partners and users, excellence in treating and offering data, innovation and promotion in official statistics, and late but not least, the upholding of professional independence. A [short video](#) on their website gives an overview of Eurostat’s work.



The [Agora Network](#) of the [EU Health Policy Platform](#) is open to registered users. Clementine Duran –DG Santé Commission Européenne – last October 14th, published attention-grabbing news about the median age of the EU population, giving many details of the Eurostat data used to the purpose. Trust me, you will be more than pleased to take a look at the [full post!](#)

## PUBLICATIONS AND NEW PRODUCTS

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- **JAMA - COVID-19 Precautions Help Make Music That's Beautiful and Safe**

*"When COVID-19 lockdowns began in March 2020, musicians around the world weren't sure whether they could safely play their instruments in front of an audience. Music teachers at all grade levels also wondered whether they could instruct a room full of students without spreading infection. Would in-person music education have to be put on hold indefinitely?"*

This is the incipit of the intriguing article by Bridget M. Kuehn, MSJ, published by JAMA last October 14th. Even if there is no musician among the EAHIL's members –which I think impossible – we all know that choirs and musicians have been left behind during the first year of the pandemic. Still now, rehearsing is very difficult, and no one wishes to be at risk. However, the study investigators, all from different US Universities, launched the Performing Arts Aerosol Study to learn more about aerosol plumes released from instruments and during other types of performances. The article by Kuehn analyses the study results and gives some practising precautions and real-world results. Not to be missed!

### SOMETHING IN FRENCH? OUI, POURQUOI-PAS?

#### **L'intelligence artificielle peut-elle créer une poésie d'un genre nouveau? – Thierry Poibeau**

Il existe des centaines de programmes de génération de poésie sur Internet – c'est-à-dire des systèmes capables de produire de la poésie automatiquement –, mais à quoi peuvent-ils servir? Ces programmes ont-ils un intérêt, au-delà de celui de satisfaire leur concepteur? Ces systèmes sont-ils dignes d'attention? Thierry Poibeau, DR CNRS, École normale supérieure (ENS) – PSL, nous conduit à visiter ce nouvel monde.

#### **Poésie informatique**

«L'Hiver a défleuri la lande et le courtil.  
Comme un roi fainéant présidant un supplice,  
J'ai serti le rubis, la perle et le béryl,  
Le divin Iacchos apporte ses délices.»

Les vers que vous venez de lire ne sont pas signés Baudelaire ou Apollinaire, mais produits par un programme informatique, plus précisément l'Oupoco (Ouvroir de poésie combinatoire) conçu par le laboratoire LATTICE, un laboratoire d'enseignement et de recherche, CNRS – École Normale Supérieure – Sorbonne Nouvelle, qui consacre ses recherches à la linguistique (lexique, grammaire, discours) et au Traitement automatique des langues. Il est dirigé...

par Thierry Poibeau qui ici expose différentes formes d'expérimentations textuelles et nous explique les limites de l'intelligence artificielle en matière de créativité. Lisez l'article complet [ici](#).

### SOME INTERESTING FORTHCOMING EVENTS:

#### **Information Retrieval Meeting (IRM 2022)**

**March, 3-4, 2022, Cologne, Germany**

Info: <https://www.iqwig.de/en/events/information-retrieval-meeting/>

#### **June 1-3, 2022, Rotterdam, The Netherlands**

**EAHIL 2022**

Info: <https://eahil2022.nl/>

... **And, we hope, many more to come!**

*Please feel free to contact me ([letizia.sampaolo@iss.it](mailto:letizia.sampaolo@iss.it)) if you have any further suggestion about events you would like to promote.*

# Special Issue: Shane Godbolt

## *Health Information & Libraries Journal*

Read the Issue > [bit.ly/35kqAMg](https://bit.ly/35kqAMg)



This **special issue** of **HILJ** has been published to celebrate the life and work of Shane Godbolt. The issue not only records the astonishing achievements of a unique medical health librarian, but also records the development of medical/health care librarianship, and the contributions of many of those who were involved with her in these developments, over half a century.

**About the Journal:** Published by the Health Libraries Group in conjunction with Wiley, HILJ aims to promote debate about new health information developments with an emphasis on communicating evidence-based information both in the management and support of healthcare services.

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Scientific Communication Unit, Istituto Superiore di Sanità,  
Viale Regina Elena 299, I-00161 Roma, Italy

- Tel: +39 06 4990 2945
- E-mail: federica.napolitani@iss.it

**Petra Wallgren Björk**

Karolinska Institutet University Library, 171 77 Stockholm

- Tel: +46852484483
- E-mail: petra.bjork@ki.se

**Gerhard Bissels**

HTW Chur, University of Applied Sciences  
Ringstrasse 34, 7004 Chur, Switzerland

- Tel. +41 81 286 38 02
- E-mail: gerhard.bissels@htwchur.ch

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The Lady Smith of Kelvin Veterinary Library, Royal (Dick)  
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Bush, Midlothian

- EH25 9RG, Scotland, UK
- Tel: +44 131 650 6176
- E-mail: F.Brown@ed.ac.uk

**Katri Larmo**

Terkko - Meilahti Campus Library, P. O. Box 61  
(Haartmaninkatu 4) 00014 University of Helsinki, Finland

- Tel: +358 2941 26629
- E-mail: katri.larmo@helsinki.fi

**Letizia Sampaolo**

CNAPS, Istituto Superiore di Sanità  
Viale Regina Elena 299, I-00161 Roma, Italy

- Tel: +39 06 4990 4323
- E-mail: letizia.sampaolo@iss.it

**Michelle Wake**

UCL School of Pharmacy, 29-39 Brunswick Square,  
London WC1N 1AX, United Kingdom

- Tel: + 44 (0)20 77535833
- E-mail: m.wake@ucl.ac.uk

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### EAHIL Executive Board (2021-2022)

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- E-mail: lotta.haglund@gih.se

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- E-mail: maurella.dellaseta@gmail.com

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Meilahti Campus Library Terkko  
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- PO Box 61, FI-00014  
Helsinki, Finland
- Tel. +358 50 4485626
- E-mail: tiina.m.heino@helsinki.fi

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**Witold Kozakiewicz**

Information and Library Centre  
Medical University of Lodz  
Muszynskiego 2

- 90-151 Lodz, Poland
- Tel: +48 42 272 54 01
- E-mail: witold.kozakiewicz@umed.lodz.pl

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Dr. Steevens' Library, Dr. Steevens' Hospital,  
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- Tel: 0876831498
- E-mail: Aoife.lawton@hse.ie

**Board Member**

**Alicia Fátima Gómez Sánchez**

TU Wien Bibliothek  
Resselgasse 4, A-1040 Wien, Austria

- T +43 1 58801-44101
- E-mail: alicia.gomez@tuwien.ac.at

**Board Member**

**Francesca Gualtieri**

Rottapharm Biotech s.r.l., via Valosa di Sopra 9  
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- Tel: +39 9066091
- E-mail: francesca.gualtieri@rottapharmbiotech.com

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Health Library  
Olav Kyrres gt 10, NO-7006 Trondheim, Norway

- Tel: 004773412177
- E-mail: astrid.kilvik@ntnu.no

**Co-opted  
Board Member**

**Petra Wallgren Björk**

Karolinska Institutet University Library, 171  
77 Stockholm

- Tel: +46852484483
- E-mail: petra.bjork@ki.se

**Administrative  
Liaison**

**Marion Heymans**

Zuyderland Medical Center  
Dr H. van der Hoffplein 1, 6162 BG  
Sittard-Geleen | Henri Dunantstraat 5

- 6419 PC Heerlen, The Netherlands
- Tel 0031 88 4596006
- Mob. 0031 6 13073056
- E-mail: m.heyman@zuyderland.nl

**JEAHIL Editor**

**Federica Napolitani Cheyne** (Observer)

Scientific Communication Unit,  
Istituto Superiore di Sanità

- Tel: +39 06 4990 2945
- E-mail: federica.napolitani@iss.it

**EAHIL  
Secretariat:**

NL-3600 BJ Maarssen,  
The Netherlands.

- E-mail: eahil-secr@list.ecompass.nl

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