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Journal of EAHIL

European Association for
Health Information and Libraries

Vol. 16 no.3

September 2020

ISSN L-1841-0715

The production of this journal
was made possible by the generous support of:

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Journal of the European Association for Health Information and Libraries

Vol. 16 No. 3 September 2020

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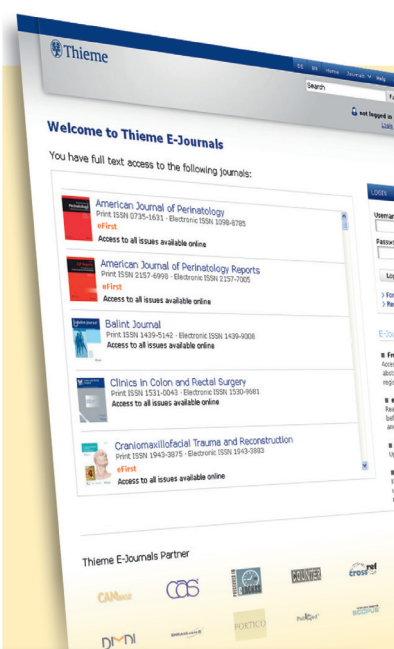
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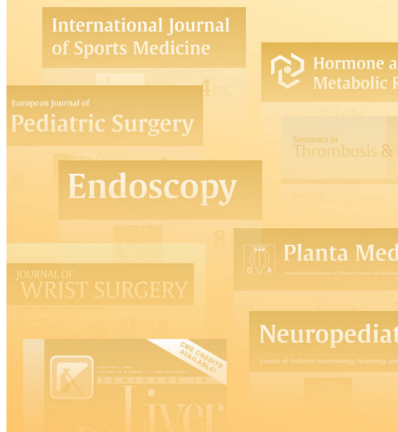


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Our new normal

Federica Napolitani

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Several months have passed since the coronavirus outbreak revolutionised our habits, and it now seems possible to timidly start making some initial assessments.

Although many things have changed, morphed in more ways than one, our capacity to adapt and to accept is driving us towards a place where we might call all of this, our new normal.

We have had to confront changes that, albeit already underway before the outbreak, were massively accelerated and enlarged. We had to deal with innovations that were abruptly introduced to cope with the new safety measures and health issues risen. Above all, social distancing deeply affected the way we relate, work, travel and are at leisure. How have libraries dealt with all this? How did they manage to cope with the practical difficulties imposed, just to cite a few, by the notion of smart working and the many safety procedures implemented? How did they meet the new needs of users? And also, which other sectors in the field of knowledge transmission have been affected (for instance, science publishing)?

This present issue of *JEAHIL* attempts to provide an answer. Petra Wallgren Bjork (Karolinska Institutet University Library, Stockholm, Sweden) and Gerhard Bissels (University of Applied Sciences of the Grisons, Chur, Switzerland), both members of the Editorial Board, have guest-edited an excellent monographic section on "The role of libraries during the COVID-19 pandemic". Undoubtedly, it was not an easy task for them to organise the issue, nor for the authors to write their paper, in such a short time. This September issue, in fact, should have been dedicated to the EAHIL June Conference. I'm sure that all readers will join me in deeply thanking them for such an effort. I am also sure that the experiences described by the authors in the pages that follow will resonate with other librarians, information specialists, editors, and other professionals in the field.

In her letter, Maurella Della Seta, President of EAHIL, informs us of the results of the EAHIL elections. Be sure not to miss her report which contains extremely relevant information for our Association.

As you may see from the Table below, the next issue of *JEAHIL* (December) will be about Climate Change. Let us know if you wish to contribute. We would be delighted to hear from you.

Future JEAHIL issues

Issue	Theme	Deadline
2020		
4 (December)	Climate change and libraries edited by Maria-Inti Metzendorf, Irma Klerings, Helge Knüttel and Gerhard Bissels	5 November
2021		
1 (March)	17th EAHIL Conference, Łódź, Poland, online	5 February
2 (June)	Artificial intelligence edited by James Thomas	5 May

Titles in this table are provisional

*Hoping we will all adjust to and possibly enjoy our new normal
I wish you all the best Federica*

MONOGRAPHIC SECTION

The role of libraries
during the COVID-19 pandemic

Edited by

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Responding to the pandemic: medical libraries and COVID-19

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The last half year has been a demanding one for all of us in many ways. How have medical libraries fared during the pandemic and the lockdown? Have they been able to continue their work, by which means? Have they even contributed to the fight against the virus, supporting clinicians, or researchers? In this issue we have gathered a few papers describing the impact of the pandemic on medical libraries, and the responses of the libraries to the new circumstances. The issue was compiled on the hoof and without the usual long-term preparation, so we cannot claim to have covered all relevant aspects. But even so a number of articles describing practice in various libraries, a few papers taking national or international viewpoints, and one looking at the patterns of scholarly communication, have come together which we hope, colleagues will find useful.

Ray Phillips opens the issue with an interview with Ian Roberts, the head of the WHO's libraries. While the world looked to the WHO for guidance, scientists and decision-makers at the organization relied on the organization's library for the evidence.

Four papers describe the response of individual medical libraries to the situation, from two countries with different strategies to handle the pandemic. Amanda Damasceno de Souza, Anna Carolina Leite Cota, and Mariana Ribeiro Fernandes report from Minas Gerais University Hospital in Brazil, Jacob Harnesk and Marie-Louise Eriksson from Karlstad University in Sweden, Karina Sjögren from Umeå University, also in Sweden, and Ingrid Andersson Helena Grahm and Anja Vikingson from the medical libraries at three different university hospitals in the Stockholm area. What lessons have been learnt? This is the question that Clare Edwards, Lucy Reid and Sue Lacey Bryant try to answer, writing from the viewpoint of a national information service for healthcare, Health Education England. And, finally, we look beyond libraries, and to scholarly publishing: what has changed under the pressure of the pandemic? Annarita Barbaro, Federica Napolitani Cheyne, and Maria Cristina Barbaro from the Istituto Superiore di Sanità (National Institute of Health) in Rome share their observations with us.

And at last we get a glimpse from at how a makers' space handle the pandemic in Britain, Michael Boyd summons their adventure.

Our thanks go to all authors who have submitted papers at short notice, and despite the pressures of work and pandemic!

Pivotal in a pandemic: an interview with Ian Roberts, head of the WHO libraries

Ray Phillips

Freelance libraries and information professional, formerly Head of Information Services at the King's Fund

Abstract

This interview with the head of the World Health Organization's Library Service took place in May 2020, at the height of the COVID-19 pandemic. The interview provides a snapshot of how COVID-19 has affected the library service in an organization which is at the centre of disseminating information and providing leadership during the pandemic. In the interview, various aspects of managing a library service during a pandemic are discussed, including: how the library copes with high demand; how they maintain a high-quality search and retrieval service; how they make use of partnerships; what are the emerging "lessons learned" for their service; and how they try to take care of their well-being.

Key words: libraries; library management; pandemics; COVID-19; World Health Organization.

Introduction

When the history of the 2020 COVID-19 epidemic is written, there should be at least a few paragraphs extolling the role health libraries played. Early during the UK lockdown, I observed a hive of activity on the email lists as librarians asked for, and offered help. I even witnessed former health librarians provide their services, free of charge, to help overwhelmed former colleagues.

As I watched from the sidelines, I contemplated what it would be like to be running a health library now, during such an unprecedented pandemic. How would we cope with being extraordinarily busy or, conversely, finding we were not needed much at all? What kind of questions would our users ask? How would we ensure high-quality with such a continually evolving topic? Would our partnerships and professional networks prove robust? How would I, as a manager, help ensure the safety and well-being of my team? What would be the future of any physical space I managed?

It was while contemplating the predicament of health libraries during COVID-19 that an opportunity arose for me to interview Ian Roberts. Ian leads the library services at the World Health Organization (WHO). How fortuitous: if there was a library service at the epicentre of this crisis, it was probably the service at the WHO.

Interview

Ian and I met via Skype in late May 2020 and had the following conversation.

Ray Phillips (RP): Thanks, Ian, for agreeing to do this interview. I've heard of you, of course, but we've never met. Tell me a bit about yourself.

Ian Roberts (IR): I'm half Italian, half Irish. I've lived here in Geneva since I was seven years of age. I did studies in Geneva, and then I did the information management programme that was offered there and got my Master's in Information Management. More recently, I did an MBA, because I thought it would help me in my career. My work background is that I started in 1993 at the International Federation of Red Cross and Red Crescent Societies, which is the Red Cross branch that provides humanitarian assistance in cases of natural disasters, man-made disasters etc. I was at the Federation's Information Resource Center for seven years. I then moved to the WHO library in 2000 because there was a job opening there as a digital information management specialist. So I just slowly moved upwards and became coordinator in 2012.

RP: Great. Tell me a little about your role, your library service and your team.

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Pivotal in a pandemic: an interview with Ian Roberts

IR: I am based in the library offices situated in the WHO's headquarters in Geneva. We also have six major WHO Regional Offices for the organization. These six Regional Offices also have libraries that are mostly a bit smaller.

Some of my duties include: making sure that we get funding, making sure our projects are on track, providing strategic leadership and vision within the realm of information management to help advance the organization's mission, ensuring our projects are carried out and have an impact, prepare reports, establish operational and marketing plans, manage staff and performance appraisals, etc. I also travel to establish partnerships with other institutions or entities that can help us in our vision and goals, as well as us maybe helping others that need our assistance.

When I'm talking about the WHO library, I try to talk about the group of libraries together. That's the headquarters library plus the six regional ones, and information specialists in-country offices. We call ourselves the WHO Global Library Group.

So, at the library in Geneva, we are 14, including myself. We represent, I think, 12 different nationalities. Our team is an international group of people working together; we're a good team; we trust each other, and we've been working together for quite a while. The team is a bit of a mix, age-wise. We operate in six languages, minimum, so that's English, French, Spanish, Chinese, Russian and Arabic. In our team, we cover those languages quite well. But the two that we cover the best are English and French.

About the role of the library, there are two major focuses. Firstly, we have two mandates, an internal one and an external one. Our internal mandate is to make sure that the organization has access to all existing scientific evidence it needs for its credibility to be sustained and for the staff worldwide to be able to carry out their work with all the information they need. The external mandate is to make sure that we are assisting the member states that govern us to access the evidence and information they need. It could be at government level for their policymakers to carry out the right decisions with the correct information at hand, or it can be for institutions like hospitals or universities, research institutes, to get access to information to help them with what they're doing.

RP: That's quite a broad mandate. What's the second major focus for your library?

IR: Yes, but we've found ways to refine it. And we have a strategy on which we focus so that we don't get carried away in too many directions. Besides, the two mandates are not mutually exclusive; some things we do for the internal audience also serve our external audience and vice versa.

Our second major focus is on low and middle-income countries. Because that's where we see that, even in this digital age, there's a significant discrepancy: they're not on the same playing field as richer countries that have access to millions of dollars' worth of subscriptions and content for example.

RP: Are you moving towards open access?

IR: The WHO is now a fully open access organization. However, we do realize that there's a different behind-the-scenes cost associated with the open access concept, with authorship costs for example that might prove far too high for authors located in institutions in low- and middle-income countries that wish to publish within the international fora. Something else I wanted to say is that there are still paywalls out there; there is still a big mass of scientific evidence and journals that users have to be subscribed to, and that's one area where we're helping our member states. That was a quick, overall statement of who we are and what we are trying to do. Perhaps it would be helpful to give some context by outlining our strategy?

RP: Ok. That sounds like a good idea.

IR: We have four strategic priorities; the first one is "WHO's intellectual output." This priority emerged from the question: "What would be the one single important thing we should be working on if we had zero resources or dollars a year?" Well, we believe it's the WHO institutional repository. The repository is a global digital library for all the organization's knowledge to be disseminated to the world. And that's the primary role of the library: to capture the knowledge of the organization it works for and disseminate it to the public at large.

The second priority is around "removing barriers" and delivering evidence equitably, what we call Research4life. It originated from a realization, many years ago, that most of the 190 countries we work in were unable to afford subscriptions to key scientific

journals and databases. So, research institutions, hospitals, universities, professional schools and also the government were left without the latest evidence and research on the best health approaches. In 2001, we had a big meeting with five major scientific publishers, who, ultimately, signed a deal with the WHO that same year, stating that they would give all their collections for free online to more than 115 low- and middle-income countries. Thus, the Hinari Access to Research for Health Programme was born.

RP: So how is Hinari doing now?

IR: So, Hinari is now part of Research4life. Hinari was so successful that other United Nations organizations became interested in it. We now have four sister programmes that include the Food and Agriculture Organization; the World Intellectual Property Organization; the United Nations Environment Programme; and the International Labour Organization. There are now more than 250 publishers participating in this public-private partnership and more than 10,000 institutions in 115 countries that have access to it. So we see access and downloads of magnitudes of multiple millions per month.

RP: What would an individual whose institution subscribes to Research4life have access to?

IR: An individual whose institution registers gets free access to 25,000 journals, 100,000 ebooks and more than 50 major databases.

So back to the strategy. The third priority is “providing a voice for LMICs” through the Global Index Medicus. We realized 25 years ago that there's a whole mass of literature in regions such as Africa, with very contextualized science and health information that, at the time, was never captured in PubMed and other big indexing databases. This is because it was thought that these publications did not reach the level of the usual criteria for quality. So the African regional office library created the African Index Medicus, with the help of those who produce the Index Medicus for the Americas. There are now five of these indices, the one for the Americas, one for Africa, one for the Eastern Mediterranean, one for the Western Pacific, and one for Southeast Asia. They all contain literature that cannot usually be found elsewhere. Now we've brought

them together through the Global Index Medicus, so you can search across regions in one go, if you wish, or limit your search to regions or countries. Of course, literature is available on the databases in many other languages besides English, so it's quite complex in terms of indexing and search interfaces. However, our biggest source of pride is that PubMed and other major databases have started indexing some journals that were first indexed in the Global Index Medicus.

The fourth strategic priority is “better evidence for better outcomes” with our evidence retrieval support services. A lot of what we're doing around COVID-19 comes under this arm of the strategy. As I mentioned, the aim of this priority is about providing better evidence for better outcomes. Only with good evidence, can you create good outputs and good outcomes. So, as part of this strategy, members of the Global Library Group provide online training courses to staff and country users located all over the globe. We teach on average 3000 people a year through these multilingual courses, with topics including information and evidence retrieval, scientific authorship, systematic reviews and many others. One of our teams also carries out systematic reviews and, introduced as part of our 2020-2025 strategy, emergency evidence retrieval that the COVID-19 pandemic response team of the organization has used and tested to the max since the beginning of the year! Finally, we also have a team of partners in collaborating centers worldwide that help us pro bono when there are too many simultaneous in-depth queries for us to respond to.

RP: We may come back to some of this later but, for now, I want to know if COVID-19 has made your library busier?

IR: Yes, we are much busier, not in every part of the library's work, but for sure, we are much busier. You would be amazed at how many different things must be thought about when dealing with COVID-19. There is the virus itself and the science behind the virus; then there's vaccination and medicine to try and help cure it; but then behind that, the organization is asked to work on all the socio-economic issues. So, for example: Are planes allowed to fly again, and if so, how can flying be made safer? And should we put passengers in every seat or not? What type of schools can or can't open and can the ones opening be made safer? So we're

working on a broad range of different aspects of COVID-19, covering life sciences and health and social sciences.

A lot of the different technical departments and specialized units across the WHO have been pulled into the response to COVID-19. The library is at the very front-end of the work on COVID-19 for the organization, with continuous search and retrieval of the latest evidence and research discoveries.

Another quantitative example of how busy we've become is the number of downloads from the institutional repository. WHO creates daily rapid reviews – for example, giving the latest evidence and guidance on the wearing of masks, etc. The reviews are then put through a rapid publishing review to ensure quality. When a rapid review is approved, we post it on the WHO's institutional repository managed by the library. Well, usually we have an average of three million downloads per month; in March and April, it was more than 9 million each month. So it more than tripled and this has strained the system so much that we've had to buy and urgently install new servers.

RP: So what are your processes for keeping on top of all this research?

IR: So, our retrieval arm of the library team does this every morning. They get up very early and scan the whole mass of literature through major databases but also directly on the sites of other major scientific and health journals sites. We search these sites on a daily basis because we found that big indexing tools can have a slight delay before the indexing, the keywords, the appropriate metadata is available. And, for us, it is essential that the WHO staff members are the first to know information relevant to the COVID-19 topics they're working on, so that their work is based on the best scientific evidence available real-time.

RP: COVID-19 is such an ever-growing, fast-moving field. How do you ensure that your end-users are getting good-quality information?

IR: What we do is we carry out rigorous searches on only rigorous databases that compare these things. We go to very well vetted journals, for example. We also go to preprint databases and cautiously sieve through

these types of materials. So, we try to have the most meticulous quality when retrieving information, and we have help from our evidence review team. They look at what is being reviewed by other partners, and they help us assure the quality of what we're retrieving.

But the most difficult is not ensuring the high quality of the information we're retrieving; it's sifting through the information to make sure that we're not inundating users with thousands of articles or citations a day. They do not have the time to go through large quantities. So, we try to bring it down to the new, crucial and manageable quantities.

However, we do not discard most of what we find: we have built a COVID-19 database in partnership with BIREME/PAHO, our technology partner in the Regional Office for the Americas, that's known across the world now. We have 25,000 citations and growing, and we started building and feeding this database two months and a half ago – it has now close to 3,000 active users per day!

RP: Refining sounds like quite a bit of work in itself, how do you do it?

IR: We also have a network of partner libraries and librarians who help us with refining some of what we find.

RP: You mentioned partnerships in your answer about refining. Please tell me a bit more about your partnerships.

IR: The library has always cherished partnerships; just due to our international approach to things and because the WHO is important in the realm of health. So an example of a partnership that was rapidly created by the Science Division and the Department of Quality Assurance, Norms and Standards within which the library is located, to deal with COVID-19, is the Evidence Collaborative COVID-19. We have 100 different people in a monthly teleconference, to collaborate on various aspects of finding, reviewing and organizing the latest scientific evidence. So we have now a number of partners working on the COVID-19 database with us, some with whom we work very closely including Cochrane, the National Library of Medicine and the Centers for Disease Control and Prevention in the US.

RP: Say a little more about how you cope with a sudden surge in the volume of searches.

IR: During the Ebola outbreak a few years ago, we suddenly got a surge in requests for systematic reviews on Ebola and for the general science around it. As a one or two-person search team, we could not cope with that. So that's when we started creating these small partnerships with collaborating centres, to help us carry out searches. We also give rapid courses in power-searching to a few people in the emergency team or beyond, so they can become self-sufficient and carry out some of the searches themselves.

We do also rely on consultancy work, when we quickly need people to help us more deeply with certain pieces of work.

RP: It's very early days but are there any emerging "lessons learned" you'd like to share from how this crisis has affected your service? Any "top tips" on how health libraries might best cope – even thrive – in a crisis like this?

IR: We haven't had time to do a review yet. In French, we've got an expression: avoir le nez dans le guidon, to have your nose to the handlebar. We've just been doing what has to be done in the most rapid and meticulous way possible without analysing in detail the process. However, I would say that, like many institutions worldwide, we've realized we don't need to be at work every day. We are just as productive working from home. Some difficulties apply and it certainly will not become an everyday reality for everybody. But I think it just shows one lesson learned is sometimes you have to grab the opportunity when it comes. Thank goodness we did define our priority areas last year when we wrote our 2020-2025 strategy because that just panned out to be exactly what we needed: a fully digital approach to things.

The main thing I would say is, marketing-wise, always be ready, because you just never know when, unfortunately, a catastrophe or something big will help people realize that the library is not a cost but an investment. And, if you invest correctly in it, the library will provide far more help for much fewer bucks than anybody else in an organization. COVID-19 has put us at the forefront of the organization's response, for example with evidence retrieval and dissemination day

in, day out, seven days a week. People are just realizing now that all the different tools and digital content we've put up are phenomenal. Recently, we had the emergency team telling us that the Global Index Medicus is incredible; they say, "We get such contextual literature that we can use, which helps us refine our guidance."

Today, speed in a certain type of library is of the essence. People want things to be seamless, and they want immediacy; proving we could do that when the organization asked for it is the biggest thing that I could have hoped for. But it only happens when you're well prepared.

RP: How are you looking after your own – and your team's – well-being in this stressful time?

IR: Luckily, we're a great team and very respectful of each other, so that's a great help. And everybody's pulling their weight. I worry that those members of the team most in demand have had to work without a break for almost three months now, and there's no sign demand is decreasing. Also, some of the more routine work is now increasing again. After all, there's still diabetes, HIV/AIDS and other diseases that need information. Some of the things we're doing to alleviate pressure on the busiest staff include calling in temporary consultancy contracts to cover bits of work. I also ensure that one of our particularly busy team members takes a break and goes home at a certain time in the day and returns to work later in the evening. So we're trying to find mechanisms to deal with this, but it is a work in progress.

RP: I want to digress a little bit. Your focus seems, understandably, predominantly digital. Yet you have a physical library and hardcopy collections. How are these faring and what's their role?

IR: It's a very deep question because collections are at the core of what a library is in people's perceptions.

Let me try and put it simply: our collections aren't used that much at all anymore. Why? Because we're serving 8,000 staff around the world, so our collections in our headquarters library have been used less and less as they are being replaced by much larger, more accessible and more searchable collections. So, we are now slowly giving away parts of our print collections.

We have a different strategy for hardcopy WHO publications and items: we're going to keep one printed copy of everything WHO has ever published and we're going to safeguard and showcase that in the same way the "King's Library" (1) is showcased in the British Library.

So, our space is going to change. A new building is being built at headquarters in Geneva, Switzerland, and a lot of WHO staff are going to be going into the new building while the older building, which is a landmark treasure of 60s Geneva architecture, is going to be refurbished. The library will go back to the renovated building, so we were very lucky, and happy, to be able to give input with the architects' plans. This new library was due to be ready in 2025-26, but everything has been delayed.

The new library space is going to be mostly digital, with a lot of little knowledge spaces for people to meet, discuss and work. There'll be lots of mini-meeting rooms and larger meeting rooms, but everything will be transparent and fluid with the architecturally playful addition of glass instead of brick walls.

With all that said, we've also been working hard on how to disseminate information differently, and how people can use their mobile devices to receive information and sift through things. Our new strategy for the next five years is completely digital and mostly concerned with how to open up and make access to knowledge and information as easy as possible.

RP: What can you tell me about your budgets?

IR: Well, I can't delve into detail, but I can say that we don't purchase books anymore, and we do get very discounted prices on our online subscriptions. Our activity budget basically covers anything that relates to working with partnerships, building our technology systems, or moving them to the cloud. It's also for a little bit of travel when we need to attend and give presentations at big international conferences and try to liaise with people and create new partnerships. And sometimes at the end of the year, we end up with a small surplus, which we use for document delivery. Salaries are not part of our small activity budget of course and represent the highest cost of the library service.

RP: Thanks very much for doing this interview, Ian.

IR: My pleasure.

*Paper submitted on invitation.
Accepted on 9 September 2020.*

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FURTHER RESOURCES AND READING

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The response of clinical medical librarians to the COVID-19 pandemic: a case study

Amanda Damasceno de Souza (a), Anna Carolina Leite Cota (b) and Mariana Ribeiro Fernandes (c)

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Abstract

The COVID-19 pandemic has changed the world with a large part of the population in lockdown for months. Given the need medical teams have for information, clinical medical librarians have played an important role in searching for the best scientific evidence. The objective of this paper is to describe the role of librarians in Brazil during the pandemic in public and private hospital libraries and in the Health Technology Assessment Service. This is a case study report of the work of clinical medical librarians during the COVID-19 pandemic. The paper is drawing on experience from three clinical medical librarians acting in the private hospital, philanthropic hospital and Health Technology Assessment Service in the city of Belo Horizonte, Minas Gerais, Brazil. The report describes the activities of clinical librarians in providing clinicians with information on how to care for patients with COVID-19. In Brazil clinical medical librarians play an important role in supporting medical teams by identifying reliable sources of information and assisting with research.

Key words: librarians; libraries, hospital; library services; South America; coronavirus infections; pandemics.

Introduction

The COVID-19 pandemic has changed the world and has infected millions of people (1). On February 26th 2020, Brazil reported the first case of COVID-19 in São Paulo. On March 19, 2020, the Ministry of Health recorded four deaths and 428 confirmed cases. Social isolation helped to slow down the spread of the virus and the collapse of the health system. However, since then, cases of coronavirus in Brazil have grown exponentially, affecting mainly cities like São Paulo, Rio de Janeiro and Manaus. In September 2020, Brazil recorded more than 3 million cases of COVID-19 (2). In Brazil, hospitals are categorized as philanthropic, public or private, and they may or may not be linked to the Unified Health System (SUS). Created in 1988, The Unified Health System (SUS) is one of the largest complexes of public health systems in the world, and provides universal and free access to health care for the entire Brazilian population. It appreciates health care related activities such as promotion and prevention (3). The SUS is managed by the Ministry of Health of Brazil, which has the responsibility to formulate, regulate, inspect, monitor, evaluate policies and actions

related to health (3). According to Noronha *et al.* (4), Brazil had 8,139 hospital establishments and 490,397 beds which corresponds to approximately 2.3 beds per 1,000 inhabitants. National actions to face COVID-19 pandemics are covered by the Ministry of Health of Brazil.

In Brazil it has proved difficult to organize social isolation and the pandemic has proved to be catastrophic (5). Under these circumstances, the provision of health information is essential for infected patients and those making decisions about how to treat COVID-19.

In the southeastern region of Brazil, the introduction of isolation and the construction of field hospitals took place in early March, and both the rate of infection and death rates for COVID-19 were lower than in other Brazilian states. In Minas Gerais up until September 2020 there were 238,515 cases of the disease diagnosed, and 5,935 deaths reported (2). The capital Belo Horizonte has one of the best hospital structures in Brazil; up until the beginning of September 2020, about 35,983 cases of COVID-19 and 1,072 deaths from the disease were diagnosed (6-8).

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This paper reflects the expertise of authors in their role as librarians in Brazil, located in Belo Horizonte, Minas Gerais, during the COVID-19 pandemic in the Health Sciences libraries of a public and a private hospital, and in strategic information services such as the Health Technology Assessment Service (HTA or ATS with its Brazilian Portuguese acronym).

Medical library services in Brazil during the COVID-19 pandemic

Although university, school, public and corporate libraries were closed during quarantine, health libraries remained open or continued their services remotely to assist in the fight against COVID-19 (9). Ali and Gatiti (10) maintained that “All librarians (public, specialist, academic and medical) have a responsibility to share evidence-based information about this pandemic”. In Brazil as in other countries, the clinical medical librarian faces the challenge of continuing to advise medical teams in hospitals, both private and public, whilst keeping up to date with rapidly changing research findings. Decision makers need access to the best available scientific evidence. During the COVID-19 pandemic, the clinical medical librarian has the important role of searching databases, and other sources of health information, to locate evidence on treatment and how to cope with the disease.

Three key roles of clinical medical librarians in Brazil during the COVID-19 pandemic

The role of clinical medical librarians in medical libraries in private hospitals

Medical libraries ensure that the health team has access to published information that is reliable, relevant and up-to-date so as improve the quality of patient care (11). During the pandemic the remit of the library in private hospitals (to promote teaching, study and research) has been adapted to meet both the demands of the frontline clinical staff who are combating the disease as well as doctors who are in social isolation.

At the beginning of April, the medical library of the private hospital, operated in accordance with the recommendations of the World Health Organization (WHO), the Ministry of Health of Brazil and the International Federation of Library Associations (12). Library employees started to use masks during face-to-face encounters and the library started to be cleaned

daily so that it was safe for use by doctors working at the hospital on the front line of COVID-19 and other diseases. Physicians in social isolation were able to consult with staff remotely (online or by phone). Consequently, during this period, the demand for online service grew rapidly. The main services offered remotely by the library staff were:

- a) bibliographic surveys of databases and health information sources (sent by e-mail);
- b) renewal of institutional access to evidence-based medicine summaries (by telephone);
- c) statistical assistance in the elaboration of a methodological design project, sample calculation and elaboration of a questionnaire for data collection (by videoconference);
- d) extension of the loan term for books and online renewal (using the Virtual Library software);
- e) a platform for holding clinical meetings (videoconference).

Regarding the return of books, the recommendations of the American Library Association (ALA) regarding the isolation of items were followed. Book covers, library surfaces, including tables, door handles, book holders and computers were cleaned by a specialized professional (13, 14).

Access to Evidence-Based Medicine summaries, which were previously carried out at any computer terminal in the hospital, started to be carried out by the library staff, by telephone or e-mail. The private hospital's medical library subscribed to a videoconference platform to support online clinical meetings and discussions of cases. The videoconferencing service was in great demand during the pandemic. Statistical assistance in the elaboration of a research project also started to be carried out by videoconferencing.

Bibliographic survey requests were made by filling out a form and sending it to the library via e-mail. The demand for database searches was one of the most sought-after services, since doctors in quarantine, or those who were not on the front line of COVID-19 due to the cancellation of elective surgeries, took advantage of this period of isolation to study.

The role of clinical medical librarians in medical libraries in philanthropic hospitals

In the medical library of a philanthropic hospital, the clinical medical librarian who works in a maternity hospital carried out a literature search to find scientific evidence about COVID-19 in pregnant women,

newborns and premature newborns. In addition, the librarian carried out a Selective Dissemination of Information (SDI) service on COVID-19 and participated in the updating of infection control protocols in the hospital, searching for evidence on best practices during the pandemic.

With social isolation and the need to avoid mass gatherings, courses and face-to-face events were suspended, and librarians identified organizations that were offering scientific events online. This highlights a new activity for the clinical medical librarian – to perform surveys and share details of the platforms that offer distance courses, webinars and podcasts that are offered by renowned professionals in the academic and scientific fields of health. It is worth noting that during the pandemic several institutions offered online training free of charge.

The role of clinical medical librarians in the Health Technology Assessment Service (HTA)

The Health Technology Assessment Service (HTA) is a multidisciplinary unit made up of different professionals, including the clinical medical librarian (15, 16). According to the World Health Organization (WHO), HTA is the systematic evaluation of the properties, effects and/or impacts of technology in health. Its main objective is to generate information for decision making, to encourage the adoption of cost-effective technologies and to prevent the adoption of technologies of questionable value to the health system (15).

In Brazil the HTA investigates new technologies, such as new medicines, medical materials, and surgical procedures, and helps to assess which treatments should be performed by the Unified Health System (SUS) National Supplementary Health Agency (ANS), Health Maintenance Organization (HMO) and by other healthcare providers. HTA employs several types of studies, each of which is used to answer a specific question relating to health care. Primary studies (ie original, or secondary studies) can be conducted to help reach a conclusion (15, 16).

Since the beginning of the pandemic HTA activity has kept abreast of all the studies related to COVID-19. Discussion groups were created, organised around 6 sub-themes: pharmacological treatment, social isolation, immunity, pathophysiology, prevention measures. These subjects were discussed weekly

drawing on published studies. The clinical medical librarian, member of HMO, created a virtual library of COVID-19 resources to disseminate, organize and index the articles analyzed in the HTA group. In addition, a survey of national and international health databases and institutional repositories was carried out to find of issues relevant to the pandemic. The search for institutional repositories grew substantially during the pandemic, as it identified studies carried out in the Brazilian context which have not yet been indexed. However, as these studies were not yet peer-reviewed, it was important to verify the authors' affiliated institution as a form of “pre-guarantee” for a reliable study.

During the discussion groups, critical analyses were carried out and statistical modeling was applied to the Brazilian situation, and since the beginning of the year, more than 500 articles have been indexed in the virtual library.

Resources for librarians and medical teams

Open access to health information is an essential resource during this pandemic. In Brazil important initiatives have been undertaken by information providers and institutions that research vaccines for infectious diseases. Three are worth noting: The Virtual Health Library (VHL) (17); SciELO - A Scientific Electronic Library Online (18); and The Oswaldo Cruz Foundation (Fiocruz) (19).

The Virtual Health Library (VHL)

The Virtual Health Library (VHL) was established in 1998 as an operating platform for technical cooperation of the Pan American Health Organization (PAHO) to manage health information and knowledge in the Latin America and Caribbean (LA&C) Region. It is maintained by BIREME (Biblioteca Regional de Medicina), a specialized PAHO center whose mission is to contribute to the development of health in Latin American and Caribbean countries by facilitating access, publishing and the deployment of information, knowledge and scientific evidence (17).

The VHL Regional Portal provides links to scientific and technical health information in Latin America and the Caribbean. It operates in three languages (English, Portuguese and Spanish). The collection of information sources consists of bibliographic databases such as Latin American and Caribbean Center on Health

Sciences Information (LILACS) (20), Medline, open educational resources, websites and scientific events, and other types of information sources (17). The VHL provides content on COVID-19 for each country in

Desenvolvimento Científico e Tecnológico) (21). It is one of the main digital libraries in Latin America and houses a collection of journals in the area of health sciences (18) (Figure 2).



Fig. 1. Screenshot of VHL Portal: Home / Windows of Knowledge Coronavirus Disease (COVID-19).

South America, Central America, the Caribbean, North America, and the Iberian Peninsula (Figure 1). Virtual Health Library Resources are:

1. Evidence map;
2. COVID-19 geographic spread;
3. Summary of reviews for potential therapeutics;
4. Research on the development of vaccines and therapies;
5. Summary of reviews for potential therapeutics;
6. COVID-19 & health topics;
7. Technology assessment reports;
8. COVID-19 factsheets;
9. Information for research;
10. Countries information;
11. Courses, videos, communication materials and infographics;
12. Ask a librarian.

SciELO - A Scientific Electronic Library Online

SciELO is an electronic library that prepares, stores, disseminates and evaluates scientific literature in electronic format (18). SciELO makes available a selected collection of Brazilian scientific journals. The library is part of a project being developed by FAPESP (Fundação de Amparo à Pesquisa do Estado de São Paulo), in partnership with BIREME. The Project is also supported by CNPq (Conselho Nacional de

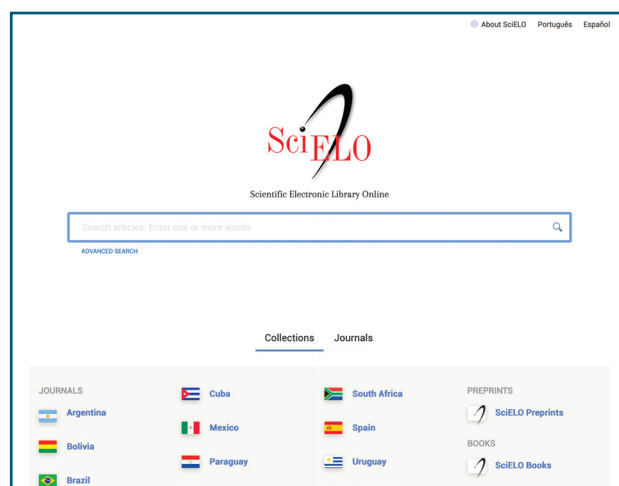


Fig. 2. Screenshot of SciELO Portal

The Oswaldo Cruz Foundation (Fiocruz)

The Oswaldo Cruz Foundation (Fiocruz), under the Ministry of Health, is the most prominent Latin American institution of science and technology in health. The guiding concepts of Fiocruz are to promote health and social development, generate and disseminate scientific and technological knowledge, and act as an agent of citizenship (19).

The Foundation runs research and technological development projects which generate knowledge for the control of diseases such as AIDS, malaria, Chagas' disease, tuberculosis, hanseniasis, rubella, meningitis and hepatitis, and other topics related to public health, including violence, climate change, and the history of science. Fiocruz is the main non-university institution providing training and qualifications in human resources for the SUS and for science and technology in Brazil. It also provides post-graduate programmes in several areas and a technical school (19).

The Foundation's main areas of research and teaching are: clinical research, development of prophylactic and therapeutic vaccines, diagnostic method development, environment, ecology and health, epidemiology, health assessments, health promotion, health surveillance, immunity and inflammation, infectious agent vector biology, parasitology and virology (19). On its website, information is available about research, tests,

Submitted on invitation.
Accepted on 8 September 2020.

diagnostics, information sources, and populations vulnerable to COVID-19 (22). The Oswaldo Cruz Foundation (Fiocruz) is part of the WHO project “Solidarity clinical trial” to investigate the efficacy of drugs in the treatment of COVID-19 (22, 23) (Figure 3).



Fig. 3. Screenshot of the Oswaldo Cruz Foundation (Fiocruz) Portal.

Conclusions

To assist clinical staff during a pandemic, the clinical medical librarian’s task is to gather information and share the main sources of information on coronavirus through The Virtual Health Library and the National Institutes of Health. In addition, librarians can respond to clinical staff’s information needs whether in hospitals, private, public or through the Health Technology Assessment Service.

In the COVID-19 pandemic governments need to follow the WHO’s recommendations, contribute to the development of vaccines, and develop political, economic and health actions to support the population. In Brazil, the COVID-19 pandemic is the most difficult health situation the country has ever faced. Given the growing number of cases and loss of life there is an urgent need for assertive decisions, aligning municipal, state and federal governments in facing the pandemic.

Relevant, high quality information in times of pandemic, is essential both to combat the disease and to develop strategies to alleviate the consequent economic crisis. In conclusion, clinical medical librarians in Brazil play an important role in supporting medical teams in facing the COVID-19 pandemic.

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Serving library users during a pandemic: the case of Karlstad University Library, Sweden

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Abstract

During March 2020, all Swedish universities moved their teaching to an online environment due to the Covid-19 outbreak. Karlstad University Library in Sweden made a number of changes in order to reduce the spread of infection while at the same time maintaining a high level of library services to its users. Opening hours were drastically reduced. All study spaces were closed. Most of the staff were working from home. A new virtual reference desk via Zoom was launched to increase the library office hours. Since things happened fast, the internal staff training was done while at the same time providing the new reference service to the users. Some initial mistakes were made but in general, this 'learn-as-you-go method' worked surprisingly well.

Key words: library services; library administration; COVID-19.

Introduction

Karlstad University is a mid-sized university located approx. 300 km west of Stockholm with the main campus in Karlstad and a small campus at the Ingesund School of Music. The university library serves around 16,000 students and close to 1,300 staff. During the first months of 2020, there was growing awareness at Karlstad University that the COVID-19 pandemic would affect not only Sweden as a country but also higher education institutions, including their libraries. The university's local crisis organization was activated, and plans were made for a large-scale move of all teaching from campus-based to online. At the library, a 4-level plan for a gradual closedown of the library was produced and communicated.

When the Minister for Higher Education and Research, Matilda Ernkrans, on the 18th of March announced that Swedish universities should move all campus-based courses and programs to an online environment, things happened quickly. The message from the Minister was very clear, and there was no doubt that the situation was serious. In this article, we will focus on the actions taken by the library to protect staff and users from the spread of infection, while at the same time maintaining a high level of library services to its users.

Moving to level 3

Already the day after the Minister's announcement, the library went straight into level 3 of the closing down plan. The reason for skipping the "softer" levels 1 and 2 was the sharp message from the Minister and the general uncertainty at that time about how contagious the virus was. The practical meaning of level 3 was:

- drastically reduced opening hours. Instead of 08.00-20.00, the library was now only open 2 hours per day (12.00-14.00), and it was completely closed Saturday and Sunday;
- the physical library was only open for basic services such as borrowing and returning books, picking up interlibrary loans, reservations etc.;
- all study spaces – the library holds more than 1,300 seats, out of which many are set up for students working in groups – were closed. Our 30+ rooms reserved for group work were all closed;
- most of the library staff started working from home. Only a minimum of staff was physically present at the library. Luckily, almost everyone had a laptop computer, which made this shift rather uncomplicated;
- all library teaching moved online, i.e. teaching academic information literacy to undergraduate students as well as the library course in Information seeking and publishing strategy for Ph. D students;

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- all academic writing support also moved online.

As our physical availability decreased, the need to increase our digital services and availability arose. Just like many university libraries, we have been providing remote access to our digital resources for a long time, so in this stage of the change process our major focus was instead on setting up a new digital reference service and providing user training and academic writing support online. The former will be described more in detail below.

Since the situation in mid-March was quite shaky, with new dramatic information communicated daily, we decided to have general staff meetings via Zoom every morning where every one of the library's staff attended. In the old pre-pandemic times, we had general staff meetings once a month, but there were several reasons for holding them daily:

- communication is essential during a crisis. There was a lot of new information that needed to be communicated frequently, from the government, from different authorities, and from the top management of the university. Since most of the staff were working from home, there was not much room for the informal communication and transfer of information that takes place during a normal workday;
- everyone in the staff had the availability to ask questions and verbalize their concerns and worries;
- a dramatic reduction of the library's physical services created numerous practical questions that needed to be dealt with "on the fly";
- similarly, the increase of our digital availability also created numerous questions, since we were launching the services while at the same time developing them.

When all university teaching moved online, the number of students visiting the campus and the university library dropped sharply. The library normally has approx. 2,500, some days even 3,000, daily visitors. Now we dropped to 100+ visitors/day. However, the situation was far from perfect when it came to the main purpose of the actions taken, namely, to reduce the risk for spread of infection. The largest problem was staff facing numerous students, and students not keeping the physical distance to other students. Since we were only open 2 hours/day, the users who needed help had to wait in line but we saw many examples when the distance in queues was not properly adhered to.

Moving to level 3.5 - remote becomes the new normal

On the 2nd of April, the Public Health Agency of Sweden launched legally binding recommendations for the country. Some of these recommendations were quite strict, and when also taking into account the problems mentioned above, we decided to move to level 3.5 in our 4-level closing down plan. Level 4 meant a total lock-down, but there was no level 3.5 in the original plan. It was simply invented along the way.

Level 3.5 meant that we turned the physical library into a self-service library, accessible only for students and staff with a valid access card. All books already had RFID tags and self-issue machines were in place, so in practical terms we were already set up for self-service. Members of the public and students from other universities were no longer admitted into the library. If our users needed help from the library staff, they were encouraged to contact us via telephone or chat. Even though some staff were physically present at the library, working from their office desk, they only went out into the open library area in order to help a patron as an exception. The default way of serving our users was to do it remotely.

During the remaining days of the spring semester, we continued to have a minimum number of staff present at the library, and the rest were working from home. An evaluation made in June showed that working from home worked surprisingly well from a technical and practical perspective, but there was room for improvement when it came to ergonomics and social interactions with colleagues and users. In terms of using the technical tools required, the staff took a giant leap in their skills in using different digital tools, such as Zoom for online meetings, but quite soon, there was also a feeling of "Zoom Fatigue".

As for the libraries' reference work, we decided to set up a staffed library room in Zoom, not only to provide users with the possibility to interact with the library in form of a virtual reference desk but also as a way of increase the library office hours.

Virtual reference desk

"In today's evolving information landscape as information increasingly moves online, academic librarians must reconsider the role of the reference desk". This statement made by Gratz and Gilbert (1) is highly valid when

reflecting on how we early on in the pandemic decided to shift from a physical to a virtual reference desk.

Under normal pre-pandemic circumstances, Karlstad university library operates two reference desks, mainly staffed by librarians. Students are welcome to ask any question they might have, including questions on circulation issues at both desks. Since the reference desk as a focal point for library services has been discussed and criticized as ineffective (2), it can seem as somewhat contradictory that early on in the outbreak of COVID-19 we decided to set up a reference desk in Zoom, the video conference platform used by the university. However, after some discussion we decided to move forward with the idea. We did not have to make any financial investment since the technology was already in place, so if it did not work out well we could simply close it down.

As with the physical reference desks, the library personnel were scheduled to staff the virtual reference desk. The librarians in the library teaching team had some experience using Zoom from different teaching settings, but the majority of the library staff had never used the tool. However, since things happened fast, we had to do the staff training, and produce internal manuals while at the same time providing the new service to our users. Some initial mistakes were made of course, but in general, this "learn-as-you-go method" worked surprisingly well.

The issue of user information and data privacy was important from the start of the virtual reference desk in Zoom. In a study by Mawhinne (3) one of the findings was that feelings of security and safety had influence on which reference method the participants used.

"Privacy and security concerns were important to participants and were a factor that influenced their preference for chat and email over texting. These concerns should be carefully considered in designing any type of virtual reference service and adequately addressed through the provision of service policy information regarding privacy and confidentiality on the library's website" (3, p. 6).

The consideration of privacy and safety when using Zoom may explain why the use of our virtual desk was fairly low.

Marketing the service

In a more normal setting, the new virtual reference desk would have been introduced in a face-to-face context to create a more trustworthy relation between

library staff and users. However, in this situation, there was no time for that. The new service was marketed via digital channels, such as the library website and social media. It was also quite common that a reference question that started in one channel, e.g. chat, was moved to Zoom when the librarian felt that would be a more efficient tool.

When interacting directly with students and other users, it became clear that many of them were not aware of our new reference desk in Zoom. This is not unique for our library, studies show that many patrons still do not know that virtual reference services are available at their libraries (3, 4).

As mentioned, the use of the virtual reference desk was relatively low. Only a few students per day were using the service. There are probably several reasons for this, such as lack of knowledge and users feeling uncomfortable with direct video chats with librarians. In a study made by Chow & Croxton (4) one of the respondents stated *"Also, being able to see and hear the person made me feel a little weird because I don't usually communicate with people via video chat"*. Although this study is old in terms of how young people interact digitally today, we still think that some library users feel a bit uncomfortable about meeting a librarian face to face in an online meeting environment. When it came to the library's chat service, where the user is anonymous, we experienced a significant increase of incoming questions.

Conclusion

To summarize, it was possible to completely change the way we were working and the way we were providing services to our users in a very short period of time. One could argue that we went too far in our precautions, or that we didn't go far enough, but library staff have expressed contentment and satisfaction with the chosen route. As for the views of the users, we have not yet had time for a proper evaluation.

The changes in how Karlstad University Library reaches out to and serves its users during the odd times of a pandemic have initially been focused on students and their needs. Now, when we know that the pandemic is still ongoing and that we probably will not go back to a normal way of working until 2021 at the earliest, we need to focus on how researchers, teachers and other library user groups have been affected by this shift in service level and service approach. Do we need to serve them in new ways, and if so, how?

It remains to be decided if the new digital reference service will be permanently added to the plethora of virtual library services, or if it will be deconstructed when COVID-19 is no longer dictating the way we offer library service.

From a leadership perspective, it is quite clear that communication is a key factor when trying "to keep up the good work" during a crisis. Furthermore, leadership and decision-making must be agile, since the situation might change from one day to another.

Submitted on invitation.

Accepted on 8 September 2020.

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The Medical Library at Umeå University during the coronavirus pandemic

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Abstract

The coronavirus pandemic changed the days rather dramatically for the universities in March this year and still does. In the Medical Library at Umeå University we had to change the library service in many ways from one week to another. This article shows how we managed to have the library open for our customers; while keeping students, faculty and hospital staff safe. We did not close down as libraries in many countries did and also many university libraries in Sweden.

Key words: libraries, medical; disaster planning; pandemics; COVID-19; education; support.

Introduction

The Swedish Government closed all campus education at Swedish universities from March 18th and forced the universities to deliver all education online for all students. At Umeå University we have 34,000 students, in the medical programs they are approximately 5,000 students both in undergraduate and master programs. Universities all over the world and their libraries have been struggling how to manage the coronavirus crisis and so did we at the Medical Library at Umeå University (1, 2).

When the classroom education had to stop, the university also closed all open areas except the libraries, but with restricted opening hours. Our normal opening hours were 8 am – 10 pm on weekdays, 11 am – 4 pm Saturdays and noon – 6 pm Sundays. So, from March 19th our new opening hours were just 8 am – 5 pm on weekdays, both for the medical and the main library. The library at the arts campus closed. All heads of all departments at Umeå University Library made a crisis plan for their department in case we should have to implement a total lockdown for the libraries across the whole university.

At the same time, we removed the possibility to make book requests, and cancelled all previously made requests. This was done to avoid too many people coming to the library, and to make the virus spreading even worse. Still all visitors could sit and study and check out and return books. Both students,

researchers, medical staff and the general public did still have access to the medical library, and still have. Many other university libraries closed or only gave access to their students and staff, but not to the general public.

As all staff with symptoms or staff with children with symptoms had to be home on sick leave or distance working, we did not have staff for all scheduled hours on the reference desk. So, at March 25th we had to limit our opening hours even more. Our new opening hours then was 10 am – 2 pm, which we will have until the new semester starts, on August 31st. In the summertime we will have shorter opening hours: noon – 2 pm.

Library services with restrictions

From March 30th there was a new decision from the government to the effect, that we couldn't have lots of people sitting in the library. We were to introduce more socially distanced spaces and avoid crowding. So now we had to close all rooms for group work. At the medical library we could close the upper floor and the basement floor. So now we had only the entrance floor opened, for checking out and returning books, scanning, printing, and reading newspapers. Our visitors could not sit in the library anymore. That was of course a very large impairment for the students. After a while we also installed plexiglass in front of the counters with a hole for the visa card reader, and signage to remind all visitors to keep distance.

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In the meantime, from March 18th we cancelled our short drop-in-courses and the last PhD-course. The teaching librarians prepared for and held all our teaching in medical information searching and reference work for all students in the booked classes, in videoconferencing programs such as Zoom. More programs than usual booked our courses this spring. Some of their own courses had to be cancelled. Better to have information retrieval courses than no courses. We set up a studio to make better zoom-teaching and films in the ordinary classroom.

All support in the Book a librarian-service switched into Zoom or Skype, or telephone if there were technical problems. From February we had already a new booking system for the support which made it easy to continue with the online support and close the support in the library. The library chat service was started again after the renewal of our website, after the chat had been down for a short period.

The interlibrary loans for the researchers were made much more with "Reprints desk", a vendor that sends the articles directly to the researcher's email. For the material and articles that we couldn't get from that service, we still ordered from Subito or Libris (the Swedish libraries interlibrary loans service).

When all university education changed to online teaching, and so many students went home to their hometowns and their practice in hospitals and healthcare, it became very urgent to offer most literature in electronic form. In discussion with the medical school we decided to buy ClinicalKey Student, which would support teaching with many e-books for the students' curriculum and other useful resources. JoVE Scientific Education was available for free until mid-June. After the free period we also bought both JoVE Scientific Education and JoVE Video Journals which has been very popular and much used in the free period. We also bought more e-books than usual.

In the medical library we also have two 3D-printers. It is very popular to learn how to print in 3D. In March we had to stop all face to face 3D-workshops at the library. Instead we started to print frames for visors. So, we made those frames in the 3D-printers and then put overhead-plastics on them. We sent all the visors to the nursing homes for the aged in Umeå. All nursing care for elderly was in huge need of visors and

masks in the beginning of the pandemic and for quite some time.

In February we had started serial seminars in cooperation with the medical humanities network at our university. We had two seminars until we also had to stop having open seminars. We hope to continue next February.

Discussion

So, what have we learned from this period? (3). We have learned so much about how to teach and support online. We have tried all kind of Zoom, Skype and Teams for our library meetings instead of having our meetings round our meeting table. Now we are setting up socially distanced workplaces in the library to get ready to open for study in the library from August 10th. We have also implemented social distancing measures in our classroom for those courses we can have when the semester starts again on August 31st. We will have introductions in the library, but without the usual walking tour in the library, because it is impossible to keep distance within a group of 15 students in the library when it is also crowded with other customers. We will show photographs or films of all the places in the library, in the introduction.

Luckily Västerbotten county, where Umeå is the biggest town, had one of the lowest numbers of COVID-19 cases per capita in Sweden this spring (4). How will it be when the semester starts again? We can't know for sure. The spread of the virus could increase when all the students come together at the university, and visit the library. We hope that no students with symptoms will come. But people have spread the virus, without knowing that they had it. A huge problem will be that library staff are required to stay at home if they have symptoms, and with opening hours from 8 am to 10 pm the staffing might not be sufficient. We hope that in this autumn we can have immunity tests for our staff. It is very worrying to have a library without enough staff. It would be very stressful if we were forced to reduce opening hours again when all the students will be here if members of staff show symptoms.

Submitted on invitation.

Accepted on 8 September 2020.

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Library liabilities in the time of corona: three hospital libraries' experiences at the heart of the pandemic in Sweden

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Abstract

On March 10th, 2020 the Public Health Agency of Sweden raised the risk level for the spread of the coronavirus in Sweden to "very high". The capital Stockholm quickly emerged as the center for the spread and hospitals in the Stockholm Region switched to crisis management. This is the story of how the libraries at Stockholm's three major hospitals handled their coronavirus journey during spring 2020: what actions were taken to uphold services and what lessons were learned.

Key words: libraries, hospital; communication; interprofessional relations; access to information; pandemics.

Background

Within the Stockholm Region, there are four hospital libraries jointly providing information services to all healthcare staff in the Region. The libraries are situated at the three major hospitals in Stockholm:

The Karolinska University Hospital (two sites), Södersjukhuset and Danderyd Hospital (*Table 1*).

The libraries all have separate managements, but cooperate closely. The hospital libraries serve healthcare staff, clinical researchers, students, patients and their families with both medical literature and recreational reading. They share Library Management Systems (LMS), cooperate regarding teaching and support, and purchase and make available all scientific e-resources for the regional healthcare staff through a joint website (1) (*Figure 1*).

Upholding liabilities during library lockdown

Decision to close

On March 10th, 2020 the Public Health Agency of Sweden raised the risk level for the spread of the

coronavirus in Sweden to "very high" (2). On March 12th the Stockholm Regional Council recommended banning visitors at Stockholm hospitals and geriatric healthcare centers (3). Subsequently, on March 13th hospital managements and library managers decided to close all libraries from Monday the 16th of March. On grounds of limiting the spread of infection, all services for students, patients and their families would shut down, all physical book lending and ordering stop, and physical teaching and support be cancelled. Overnight we became libraries without physical visitors and our sole focus and user group became the healthcare staff and researchers of the Region. They would from now on be served through telephone, e-mail and video meetings and using our e-resources only (*Figure 2*). Since the library staff were used to cooperating between libraries and working groups for LMS, e-media and website already existed, discussions on workaround solutions to maintain services and fulfill our mission and liabilities towards our users set off straight away. "That healthcare staff have continual access to the literature and scientific information they need is vital. That is why we exist!" one library staff member emphasized. Ideas were discussed between

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Karolinska University Hospital (Karolinska)	Södersjukhuset (SÖS)	Danderyd University Hospital (DS)
<ul style="list-style-type: none"> • 16,000 employees at two sites: Solna (north), Huddinge (south) • 10 library employees: 2 libraries with 1 library manager 	<ul style="list-style-type: none"> • 4,800 employees • 5 library employees including manager 	<ul style="list-style-type: none"> • 4,000 employees • 6 library employees including manager

Table. 1. Stockholm's three major hospitals and their libraries



Fig. 1. The hospital libraries' joint website for healthcare staff of the Stockholm Region (visiting cards).



Fig. 2. A closed sign outside Södersjukhuset's Hospital Library.

library staff through e-mails and brought to library managers for decision-making. Library managers at the hospitals encourage cooperation between the libraries and staff taking responsibility and initiating solutions. Henceforth, the top-down decision to close the libraries spurred several bottom-up liability solutions.

Liability solution 1: medical book service
 Three days after the libraries' closure we made it possible for healthcare staff to order printed medical books from the collection by e-mailing or calling us and have them sent to their workplace or left at the hospital reception desks for collection. Nevertheless, if the

lockdown proved to be long-lasting, we realized we would need a better solution, for both users and library staff. Therefore, eight days after closing we launched a new patron category through our library management system making it possible for healthcare staff and students doing internship at the hospitals to order and queue for books as usual. Information on changes in services was spread through automatic e-mail replies through the LMS, on intranets and websites, and a new routines manual for library staff was produced. Despite different work situations at the libraries, with some having no staff present, books to all healthcare staff in the Region, regardless of location, were supplied by the remaining libraries.

Problems encountered consisted of healthcare staff not knowing their internal work addresses, and, because of COVID-19, several had changed locations and were hard to reach, and book packages being too bulky or too many for the internal post slots, resulting in undelivered books and disappointed staff. At the libraries, the new routine triggered a substantial increase in book handling and packaging.

Liability solution 2: e-resources

Our webpage for healthcare staff in the Region was now our only library branch. The working group for our website modified the front page and continually informed users on changes in services. On March 19th the group started discussing setting up a special COVID-19 page with links to accessible research. The

keyword agreed on was *usability*, supplying a usable selection of reliable resources to clinicians and researchers. Inspiration and ideas were taken from similar projects at other medical libraries and from the discussion forum run by *Eira*, the library consortium for Swedish hospital and healthcare libraries. *Eira* had immediately set up a COVID-19 page with tips and available e-resources (4). The newly written *Eira*-report *Vägen till vetenskapen/Pathways to Science* (5) was also consulted to better understand how healthcare staff seek information in practice. Planning was carried out through e-mail since some of the staff were working from home. As we have our own library technician, set up and design of the COVID-19 page was swiftly done and colleagues supplied feedback. Our COVID-19 page was launched on April 6th. Statistics show that during the first month our COVID-19 page had 900 page views and had become our 5th most used subpage (Figure 3).

Marketing the COVID-19 page and e-resources was done through e-mails to key contacts at hospitals and in primary care using the internal regional email directory. We linked to the page on our library subpages on the hospitals' intranets and webpages. The Stockholm Regional Council healthcare webpage, *Vårdgivarguiden*, was contacted and immediately linked to our COVID-19 pages among their COVID-19 resources (6). One unexpected difficulty was getting the link added to the hospitals' own intranet COVID-19 pages. At one of the three hospitals, hospital

The screenshot shows the top of a website for Region Stockholm. The header contains the logo and name 'Region Stockholm' and 'Biblioteken i Region Stockholm - för dig som arbetar i vården'. There is a search bar and a 'Skriv ut' button. Below the header is a navigation menu with buttons for 'Artiklar & tidskrifter', 'Böcker & e-böcker', 'Hitta evidens', 'Skriv & publicera', 'Sökhjälp & kurser', and 'Om biblioteken'. The main content area is titled 'Covid-19' with the subtitle 'Kunskapsstöd och senaste forskning'. Below this, there is a paragraph of text and four red buttons with white text: '+ Kliniska beslutsstöd - expertgranskade sammanfattningar av senaste evidensen', '+ Databassökningar', '+ Riktlinjer och myndigheter', and '+ Några tidskriftsförlags information om covid-19'.

Fig. 3. The special COVID-19 page on biblioteken.sll.se.

management was instantly positive and swiftly included the link on their COVID-19 page. At another hospital, despite positive feedback and extensive correspondence, the library's link was not added to the hospital's internal COVID-19 page until the beginning of June, and then only on a subpage called "External links". At the third hospital, the hospital's internal COVID-19 page was reserved strictly for information from the hospital management. After one month the library could publish a short press release about the COVID-19 page in the news section on the hospital intranet.

Liability solution 3: teaching, support and mediated searches

Despite offering alternative solutions, almost all the planned teaching sessions during the spring were cancelled. Some of the planned lectures were turned into digital sessions, but technical problems, lack of experience of digital teaching and tools, as well as the need for swift replanning, generally led to shorter sessions than usual.

Producing tutorials on information seeking through short films had been discussed before and was again introduced as an idea early on during the lockdown. A project was started producing scripts to video tutorials for guides to our website and frequently used databases. However, we realized this project needed more manpower than we currently had available. Instead, new PDF search guides for databases were produced and published on our website, a job also easily carried out by colleagues working from home.

We immediately noted a decrease in support requests despite us offering digital meeting solutions. Even support for reference management programs, a relatively large proportion of our physical support sessions normally, decreased substantially. To a large extent this was probably a consequence of reorganizations at the hospitals and clinical needs being prioritized over research, as well as increased workload and lack of experience with the digital tools at hand. Most support cases were handled through e-mail and the few support and teaching sessions carried out through video meetings all entailed technical problems. In contrast, services like bibliometric verification and statistics were not affected at all, as users were used to solely digital support for such matters and final report dates set.

During the first week of closure we announced on our website that mediated searches for COVID-19 would

be prioritized. We did get requests for COVID-19 searches, but statistics show that search requests decreased by 43% for March and 47% for April compared to last year. One reason might be the sudden work overload and reorganizations at the hospitals. However, the scale and complexity of the requests increased during this period. The libraries cooperated on the received COVID-19 searches and both national and international search forums and library websites were helpful in searching this new field (4, 7, 8).

Liability solution 4: recreational services

The recreational service for both staff and patients and their families was completely shut down, and no contact with wards was allowed. To uphold some service, the free-to-use bookshelves outside the libraries were kept extra well stocked. Social media channels were used to communicate with users and promote e.g. e-book recommendations, poems of comfort, writing tips including a notebook patients could collect outside the library, a digital book circle reading of "The Plague" by Albert Camus, as well as displaying what the library staff were doing during the coronavirus lockdown. At one library a project of repainting the return boxes placed around the hospital was carried out.

Lessons learned and wishes for the future

While still in the middle of the pandemic, but with some restrictions lifted and our libraries reopened, we reflect on how to be better prepared for the next crisis.

The uncertainty of a pandemic inevitably makes all forms of planning difficult. Time and effort put into making new routines can be altered a few hours later due to new orders. One thing we have learned is that in times of crisis and with crisis management in place at hospitals, information might be more centrally managed and normal communication pathways sidelined. Hospital managements were reorganized into more hierarchical structures and decisions were therefore made on a different structural level than before. To us, this meant our regular ways of communicating at the hospitals no longer worked. Internal communication took more time and effort than usual.

The spontaneous daily contact with users – clinicians and researchers as well as students and patients – was lost during the lockdown. Different user groups have different digital behaviors, habits and needs. Even

though all our digital channels were used, e-mails and physical information sheets sent out to inform users of changes, communicating with and reaching all our users was a challenge during the lockdown, both due to the massive inflow of questions and the changed communication pathways. We conclude that to be even more present digitally and at the same time more out-reaching to find our users outside of the normal pathways and the physical library, is important. Having a communication plan including crisis scenarios would be useful.

The Stockholm hospital libraries are all small units used to short decision-making paths and meetings face to face, therefore switching to digital meetings only, both within and between the libraries, was a new experience. We were all used to attend such digital meetings but not organizing them ourselves. Several platforms were available and colleagues working from home, as well as library users, each had their preferences and options, which meant we all quickly had to access and learn several different platforms. The importance of continuing to write agendas and protocols for digital meetings was another lesson learned. One library was in the process of hiring new staff during the spring and this was carried out through digital interviews, a new experience as well (Figure 4).

Additionally, we learned the benefits and pitfalls of going digital with teaching and support. Our experiences of providing support and teaching sessions through digital platforms were limited and we furthermore noted that healthcare staff were similarly lacking in user experience. Being well acquainted with digital communication platforms and tools can save time and be as effective, but requires practice, technical preparedness, adequate pedagogical approaches and distinct routines in their own rights,



Fig. 4. *The “New normal” way of working with colleagues. The three authors meeting online.*

for both healthcare and library staff.

Contrary to what one might think, the workload at the locked down hospital libraries did not decrease during the crisis. Correspondence with our users increased and was intense through e-mail, and new routines and less staff at hand furthermore prompted the workload. The Public Health Agency early on recommended all Stockholmers to work from home if possible and most library staff did, some due to symptoms or belonging to a risk group. However, technical issues such as having desktop or laptop computers, the accessibility of work files and programs and Wi-Fi strength affected the practicalities of working from home. As healthcare libraries, one of our main liabilities is certifying that our users have remote access to the scientific material they need to work evidence-based and conduct their research. However, concurrently ensuring remote access to files and tools for library staff, to be able to uphold this liability towards our users, was something we had not foreseen fully. The pandemic taught us that we need to be as flexibly equipped and remote focused concerning our own tools.

How to best assist our clinicians and researchers in finding relevant and useful scientific information on the coronavirus was our major focus during this crisis. Non peer-reviewed and preprint articles – material we normally do not promote – were not included on our COVID-19 page and rarely searched for in mediated searches. Should we have reasoned differently to maintain our liability towards healthcare staff? We followed discussions on withdrawn articles and preprints but would have wished to be better acquainted with the field. Further discussions on whether we should comment or in other ways draw healthcare staffs’ attention to the special circumstances for this type of material are needed.

During the lockdown, some library facilities were quickly reused for crisis management meetings, making protective equipment (PPE) and even as storage room, a practical and logical solution in a time of crisis. However, one risk with having the facilities closed or services reduced might be hospital management failing to recognize the library’s significance during the pandemic. We thus conclude that, during a crisis, being continually visible to hospital management with what the library’s role, needs and liabilities towards healthcare staff are is crucial, in order to not lose ground.

Along our coronavirus journey, we discovered that the three hospital libraries, despite being used to cooperating intensely, had found different solutions to the same problems concerning everything from cleaning routines to workplace attendance. This is partly an effect of belonging to different hospital organizations and of our varying physical and technical equipment and circumstances. Working at different hospitals, each with its own management, we are separate and will always act differently. However, as closely collaborating libraries cooperatively supporting all healthcare staff within the Stockholm Region, we need to focus on what we can plan and achieve together. Coordinating even more decisions will make us more efficient and will perhaps also cause less stress among library staff. In preparing for future crises, a joint contingency plan would be desirable and is achievable. Such a plan would make decision-making easier, quicker and more comparable.

No one had foreseen a crisis of this scale and its effect on the libraries. In consequence, learning from this experience is vital. We conclude that the healthcare libraries of Stockholm need to continue to cooperate and coordinate to find ways of making decisions for all libraries, and thereby being even better prepared and successful in upholding our liabilities towards our users during the next crisis.

Submitted on invitation.

Accepted on 8 September 2020.

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Responding to COVID-19 in the National Health Service in England: positive changes and learning for Knowledge for Healthcare

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Abstract

The article provides an overview of the response from the Health Education England library and knowledge services team to the COVID-19 pandemic. The article covers activity and initiatives that were put in place in England from March 2020 to address challenges and issues arising for library and knowledge services delivering to the National Health Service. The article reflects on the learning from the developments that have been implemented to date and considers the positive changes that have arisen in the continued delivery against five national, strategic drivers.

Key words: COVID-19; libraries, medical; health literacy; knowledge management; evidence-based practice.

Introduction

In response to needs identified during the initial weeks of the COVID-19 pandemic Health Education England (HEE) library and knowledge services team has led a series of initiatives. These focus on enabling the system to work smarter and on fostering greater collaboration between libraries, and with partners and stakeholders. At the same time, they continue to deliver on the strategic direction of Knowledge for Healthcare (1) in England.

Background

Healthcare in United Kingdom is devolved to home-country administrations in Scotland, Wales and Northern Ireland. HEE is the steward of investment in library and knowledge services on behalf of the National Health Service (NHS) in England. Knowledge for Healthcare (1) provides a strategic development framework for NHS-funded library and knowledge services. It sets out an ambitious vision to ensure the use of the right knowledge and evidence at the right time (2).

The HEE library and knowledge services team leads the strategic approach to the delivery of Knowledge for Healthcare and the development of NHS library and

knowledge services across England. The team incorporates a knowledge management (KM) function that works internally to mobilise evidence and manage and share organisational knowledge within HEE.

The NHS in England is a complex system, comprising a wide range of different organisations with different roles, responsibilities and specialities (3). Across England 184 library and knowledge services are funded by the NHS to provide services to 223 NHS provider trusts.

Identifying the initiatives to support COVID-19

The HEE library and knowledge services team has established a programme plan in response to the challenges, demand for evidence and support needs identified through the initial weeks of the COVID-19 pandemic. The plan links to the work strands through which the team manages the implementation of the Knowledge for Healthcare strategy.

Development priorities were informed through horizon scanning, partnership working and through regional meetings and one-one discussions with service managers across the NHS library networks which identified specific challenges and support requirements.

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In May 2019 HEE also carried out a snap-shot survey to ascertain the status of the library and knowledge services. The survey demonstrated that all NHS library and knowledge services have continued to deliver services throughout, ranging from "virtual only" through

to fully opened and staffed (Figure 1). The survey highlighted which services were being restricted or not offered; this information also helped to inform the plan and development of initiatives.

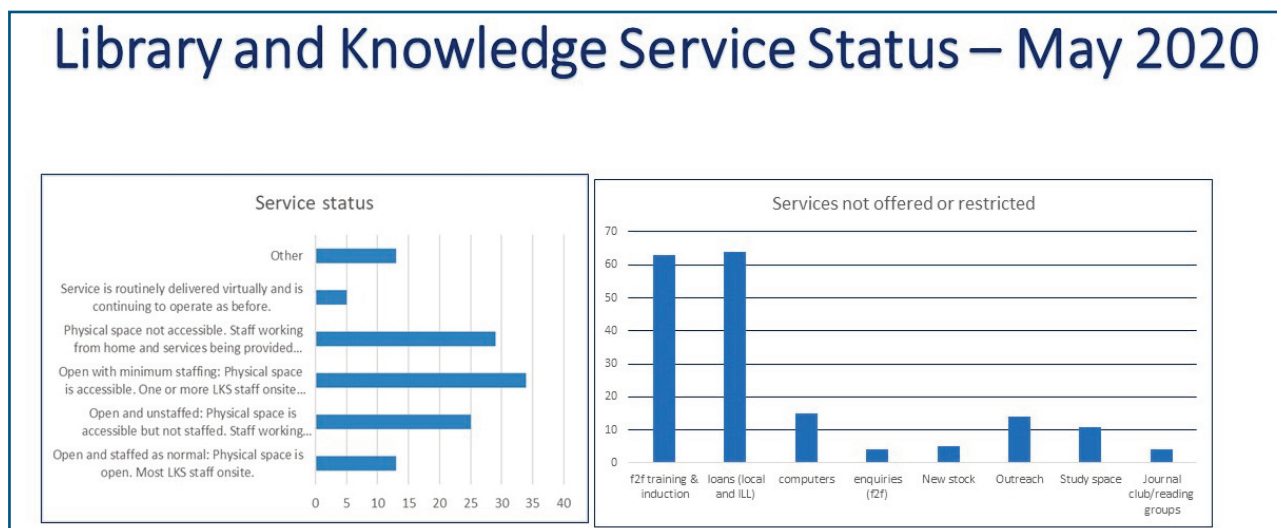


Fig. 1. Results of COVID-19 Library and Knowledge Services Status survey.

Outcomes achieved in delivering COVID-19 initiatives

McLaren (4) provides a detailed overview of the initiatives developed by the HEE team, often in partnership and collaboration with local NHS service managers. This review of these initiatives is structured around five primary drivers, or underpinning goals, which we believe will "drive" the delivery of our vision for Knowledge for Healthcare.

Staff and learners make optimal use of high-quality knowledge resources and evidence at the point of need

A key driver has been to optimise the evidence base for the NHS workforce. Trusted sources of information on COVID-19 have been collated into a single place. The HEE team has worked with suppliers to ensure new content and COVID-19 offers are discoverable via the routes most typically used by the NHS workforce.

A priority has been to work with BMJ Best Practice to promote this as our national clinical decision support tool for England, including the COVID-19 related patient information, and to work towards integrating this within electronic patient records. Access is also

promoted through e-Learning for Healthcare, HEE's e-learning repository for the NHS.

The HEE LKS team worked with suppliers including publishers, Eduserv for OpenAthens authentication and the British Library for document supply services to ensure business resilience, the continued on- and off-site access to administrative systems for library staff and the evidence base for the healthcare workforce.

A key strand has been to optimise the expertise of the NHS library and knowledge specialist workforce by coordinating resources and capability through collaboration. This resulted in the development of both a Search Strategy Bank and Current Awareness sharing bank (5). As of 31st July, 171 searches on COVID-19 related topics have been added, Figure 2 shows the visitors to the COVID-19 search bank and other areas of the blog.

The work to support COVID-19 has further demonstrated the benefits of working collaboratively. Library and knowledge specialists have requested that this type of collaborative initiative is extended to cover evidence searches on a wider range of topics. The experience has also reinforced a growing appetite for centralised content procurement and for a national

Responding to COVID-19 in the National Health Service in England

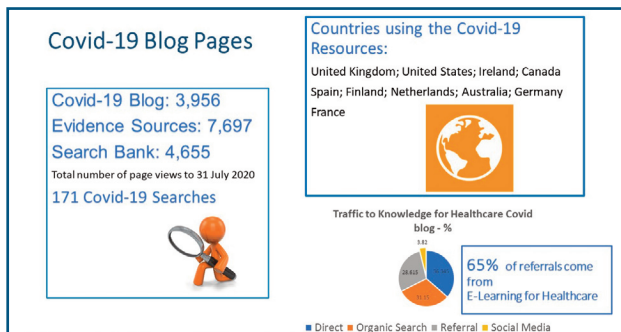


Fig. 2. Visits to the COVID-19 pages of *kfb.libraryservices.nhs.uk*.

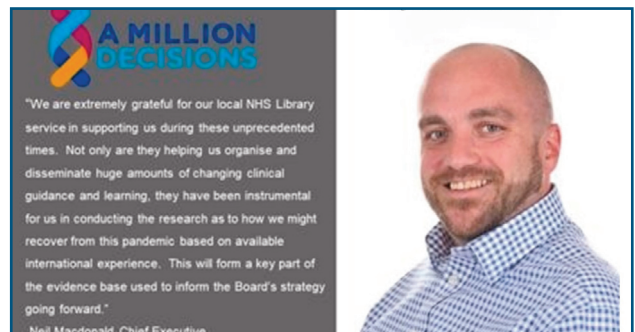


Fig. 3. Social media card from the Chief Executive of Buckinghamshire Healthcare NHS Trust.

discovery system. This is something that we want to continue to foster and enable smarter working practice so we can maximise both the expertise of our small specialist workforce and the resources available. Access to evidence services and resources has also been extended. Across England seven temporary hospitals, named Nightingales, were set up to provide extra beds in case needed to cope with the COVID-19 pandemic. The HEE team played a role in enabling access to evidence and knowledge services for the Nightingale hospitals by supporting NHS library service managers to shape the offer. The team also facilitated a community of practice amongst the library service managers involved who have particularly valued this opportunity to share learning, ideas and approaches to problem-solving as they worked with the new hospitals. The pandemic has, however, also highlighted the information needs of workforce groups who are ill-served by current library and knowledge provision, such as primary care pharmacists, something that needs to be addressed as we move forward.

Healthcare organisations, staff and learners received quality assured, business-critical knowledge and library services

In the crisis, librarians and knowledge specialists stepped forward to demonstrate their business-critical roles. The specialist workforce used their KM skills to support decision making, enhancing awareness amongst senior managers, including knowledge support for the Board and senior decision making, supporting gold/silver command and synthesising and summarising complex evidence to deliver rapid evidence reviews. *Figure 3* is a social media card from

the Chief Executive of Buckinghamshire Healthcare NHS Trust explaining the impact of the library and knowledge service team during COVID-19. As more services have been delivered virtually the library and knowledge workforce has demonstrated a capability for rapid and agile development and there is an opportunity to make greater use of technology to deliver knowledge services. Meanwhile, the extension of digital knowledge service delivery has highlighted that physical library space is also valued by the NHS workforce. Through COVID-19 it has been welcomed as a health and wellbeing space of sanctuary as well as a learning space (*Figure 4*).



Fig. 4. Impact case study showing the benefits of the physical library space.

Within HEE the KM team is contributing to the development and structure of "e-learning for Healthcare", working with colleagues on the HEE Technology Enhanced Learning COVID-19 programme for the health and care workforce.

The knowledge and library services workforce has increased capability, confidence and capacity to meet the evolving knowledge and information needs of the healthcare system

Supporting NHS library and knowledge staff in England has been an important aspect during the pandemic. Ways of working have changed, teams have needed to adapt the workplace and support for wellbeing has been crucial. The HEE team has kept in regular contact with their colleagues in NHS libraries throughout the pandemic to listen and enable learning and sharing.

As services moved more to online and digital provision there has been a need to support digital skills development. Training workshops for the library workforce in facilitating virtual meetings and online training proved extremely popular. A small group has benefited from "train the online trainer" skills development ready to cascade training to the wider healthcare workforce.

The wellbeing and resilience of staff is critical to ensure a motivated and effective workforce. The team has offered training on personal resilience and on how to lead a team in a pandemic. With changes in government advice since May 2020 more services are starting to reopen the physical library space, a cause of anxiety for some staff members. The collated resources for adapting the workplace has been one of the most accessed sections of the "For LKS Staff" (5) resource on the COVID-19 blog.

Continuing to develop our national training and leadership programmes in this context will be vital to increasing the confidence and capability of staff and to developing and sustaining new ways of working.

Staff, learners, patients and the public are better equipped to use evidence-based patient, health and wellbeing information

A priority work strand in Knowledge for Healthcare is health literacy and evidenced based patient information. The team identified that it was difficult to find trusted information resources for the public about coronavirus. A website (6) has been developed to bring together existing online resources. The site includes content in Accessible formats and for Children and Young People, Older People, Cancer and Coronavirus,

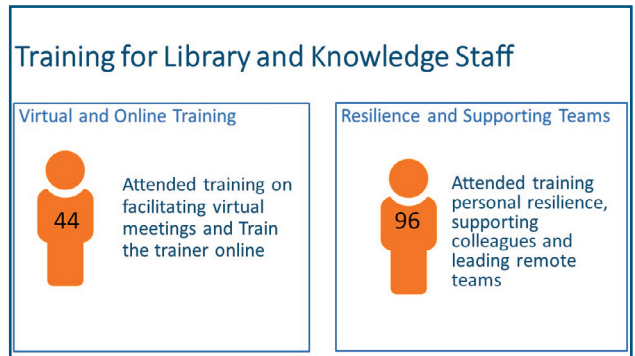


Fig. 5. Numbers of staff receiving training.

Long Term Conditions, Mental Wellbeing, Carers and Looking After Yourself.

Health literacy e-learning (7) was launched in April 2020, developed in partnership with National Education Scotland (NES). This was a planned initiative which is now being promoted as part of the COVID-19 response to enable the healthcare workforce to more effectively communicate health information to patients and the public.

The health literacy and patient information resources have been used well since their launch during the pandemic. Figure 6 shows the reach and impact of these resources.

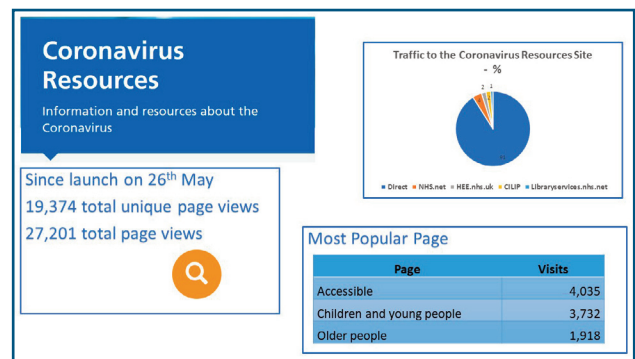


Fig. 6. Use of the COVID-19 resources at library.nhs.uk.

Healthcare organisations, services and systems effectively mobilise evidence, learning, knowledge and know-how to enable evidence-based policy and practice

Knowledge for Healthcare advocates for the transformation of the role of the librarians and knowledge specialist to become business critical in mobilising evidence and organisational knowledge across the NHS in England (8).

The pandemic generated a need for rapid distillation of lessons learned, and clarification of unanswered questions, both by managers and in clinical practice to expedite the adoption of changed ways of working. The HEE team has actively promoted the NHS Knowledge Mobilisation Framework (9) which introduces a suite of tools such as After-Action Review and Retrospect. This has been supported by the launch of a new video (10) demonstrating the tools and also incorporates the questions used as the Nightingale Hospital in London was set up. NHS librarian and knowledge specialists

widening access to published sources of evidence resource and technology.

Learning and next steps

NHS librarians and knowledge specialists have continued to adapt to a changing and challenging environment. However, developments and new ways of working have continued to deliver against the five Knowledge for Healthcare drivers including identifying and implementing service transformation and innovation.

The work achieved demonstrates an acceleration of beneficial changes in ways of working that need to be implemented for the future and which we look to build upon as part of the refresh of the Knowledge for Healthcare strategy. We plan to continue these developments, harnessing the appetite for collaborative working to implement further advances, for instance building on digital and health literacy skills, ensuring equitable access to resources, and mobilising evidence to support shared learning. With uncertain times ahead we will be using KM tools such as After Action Review amongst the HEE library and knowledge services team to reflect and gather our learning ahead of the English winter.

More broadly, NHS teams in England are aware of the risk that we fail to act on the learning generated during the pandemic meaning that the positive outcomes are lost. There is a significant role for library and knowledge specialist to help the NHS build resilience, by supporting the workforce to access evidence, capture and share the learning and build knowledge assets to inform management and practice in any future phase of COVID-19 or, indeed, any future pandemic.

Submitted on invitation.

Accepted on 10 August 2020.

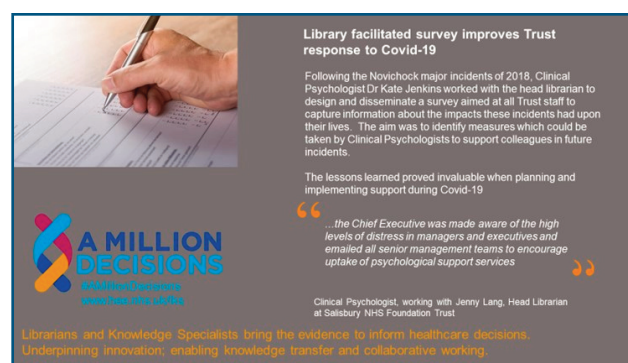


Fig. 7. Impact case study showing the value of lessons learned.

have been crucial in promoting these resources and facilitating the lessons learned.

The team will continue to support health librarians "on the ground" to expand the effective use of KM tools. Organisations also want to build knowledge assets to inform best practice and management of any subsequent phases of the pandemic.

Partnership working

Partnership working enabled NHS library and knowledge staff to support the healthcare workforce and patients effectively during this time. In England, HEE has worked closely with the Department for Digital, Culture, Media and Sport, Public Health England, National Institute for Health and Care Excellence, NHS England and Innovation and the Chartered Institute of Library and Information Professionals resulting in shared guidance, improved business continuity and disseminated good practice. There have been many discussions amongst peers right across the United Kingdom, with NHS leads in Wales, Scotland, Northern Ireland and with colleagues in the Republic of Ireland focussed on disseminating information,

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The impact of COVID-19 on scientific publishing

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Abstract

This article proposes an analysis on the impact that COVID-19 pandemic is having on the process of scientific publishing in academic journals. It will specifically describe the response of the scholarly publishing community to meet the pressing demand from authors and researchers wishing to disseminate, as rapidly as possible, information on the virus. Its aim is to provide an overview for the community of librarians and information specialists about publishing in the COVID-19 era.

Key words: COVID-19; pandemics; scholarly communication; peer review, research; preprints as Topic.

Introduction

Over the past two decades, the international scientific community engaged in a debate on the opportunity to make scientific information of public interest freely accessible among researchers worldwide in order to speed up the spread of relevant findings. The Ebola (2014-2016) and Zika (2015-2016) virus outbreaks provided an added sense of urgency to these efforts (1); the public health emergency triggered by the COVID-19 is an issue of international concern and an unexpected incentive to the debate. The collaborative efforts of practitioners and researchers to find an effective solution to the global health crisis have highlighted the urge to embrace the adoption of open data, open science and new forms of communication. From January to June 2020, the fight against the virus has produced an unprecedented flood of scientific information across the internet with the number of COVID-19 papers growing tremendously (2). Before entering formal peer review, a huge amount of new findings has been released in the form of preprints through platforms such as bioRxiv (<https://www.biorxiv.org/>) and medRxiv (<https://www.medrxiv.org/>). These preprints often receive a great deal of attention on social media: on the microblogging site Twitter, the top COVID-19 preprints have been retweeted over 10,000 times (3). At the same time, to support the public health emergency efforts to contain the spread of COVID-19, publishers have committed to accelerate the management of article review processes in order to

publish papers as quickly as possible. Several publishers have made articles on COVID-19 issued in their journals available online free of charge, taking on the great responsibility of ensuring both quality of contents and speed of information. The massive number of articles on COVID-19 submitted for publication demands skills and new strategies to find balance between accuracy, scrupulousness, flexibility and urgency of release, and journals are quickly evolving their publishing procedures in response to the COVID-19 health crisis (4).

One of the consequences of these changes in the dissemination of scientific information is that its increased speed and volume have made it harder for researchers to quickly spot the most relevant findings (5). The sharing of scientific and clinical data in a very short period of time has led to a serious concern about the quality of its contents and the need to rethink the peer-review models practiced by science journals. The World Health Organization (WHO) has defined the dissemination of an over-abundance of information – some accurate and some not – occurring during an epidemic, with the term “Infodemic” (6). Assuming that accurate information must spread at least as fast as the virus, it is imperative that those involved in communication allow public health information to spread faster and in the best possible way.

COVID-19 has made an impact on work culture in so many ways. Video conferencing and virtual training have been the new normal during the strict lockdown

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measures imposed by governments to contain the pandemic, and the enormously increased workloads have required adaptability and very high level of competence. Indeed, with great changes come great responsibilities, but opportunities and privileges as well.

This article analyses the influence and changes of COVID-19 public health emergency on scientific publishing. The authors, editors of the science journal *Annali dell'Istituto Superiore di Sanità* (the official Journal of the Italian National Institute of Health), aim to provide a point of view for the community of librarians and information specialists about publishing in the COVID-19 era, according to their expertise on the topic.

Science publishing in times of crisis

During the COVID-19 outbreak, science journals have experienced an unprecedented situation: they received what many called a “tsunami” of COVID-19 related submissions, which eventually lead to a “pandemic” of publications (7). Indeed, an analogy between the pandemic curve and the growth in the number of published papers has been reported by some authors (8). This huge increase in the number of new publications on this topic mainly affected the most prestigious journals. For instance, three to ten times the usual number of submissions occurred in *The Lancet* group of prominent journals (9).

How did the journals react to this pressing demand from authors wishing to disseminate, as rapidly as possible, new information on the virus? Major publishers could count on strong infrastructures and on a wide network of international editors and collaborators. But still they had to quickly adapt their workflow systems to meet the new publication needs. The other scholarly journals, published at national or international level, also struggled to modify their standards and procedures to keep up with the pace. Both categories of journals were also facing the challenge of having their own editors and staff working from home during the lockdown period, in some cases with inadequate technological resources.

The urgency to publish information and data potentially useful to save as many lives as possible, during the first weeks of the pandemic, forced editors to consider breaking some traditional barriers in the publication process. It was clear from the beginning that the first

data on the virus had to be published with a fast-track priority. This in order to help researchers rapidly develop their studies, clinicians deal with their patients flocking to the emergency departments and governments to adopt restrictive measures supported by scientific evidence both at national and global level (see, for instance, 10). National health institutes rapidly produced technical, surveillance or situation reports, which often represented the only source of information and data to cope with the pandemic at national level. Such reports contained precious “raw material” later developed in journal articles.

Under the urgency of the coronavirus crisis, an unexpected small revolution occurred in science publishing and several ongoing changes and developments were further accelerated. At least two areas of the publication workflow were affected: the peer-reviewing and the dissemination of research results.

Peer-reviewing

Peer-review has been a keystone in the publication process from the times of the *Philosophical Transactions* of the Royal Society of London, at the beginning of the nineteenth century (11). Though highly debated for decades, this independent critical assessment is still considered by the International Committee of Medical Journal Editors (ICMJE) as “an intrinsic part of all scholarly work, including scientific research, [and] an important extension of the scientific process” (12). Recently, a general tendency towards a greater openness in science is forcing the scholarly publishing community to study different – untraditional – forms of open peer-review, which are currently listed under the so called “open peer-review umbrella”. At present, however, the great majority of biomedical journals still adopts a traditional peer-review system, as shown in a study by the same authors of the present paper on the journals listed in the Public, Environmental and Occupational Health category in the Journal Citation Reports, whose results will be presented at the EAHIL Virtual Conference which will take place in November 2020 (13).

As it is well known, traditional peer-review can be a time-consuming process. When a manuscript requires more than one round of review before being accepted for publication, the process can last several months. With the pandemic outbreak, these lengthy review times had

to be reduced. Editors were rushing to identify papers, whose content was potentially useful to fight the virus, and publish them as rapidly as possible. They were sometimes forced to accelerate the peer-review process contracting it even to a few days and authors felt the urge to make their papers available in the form of preprints (see the following chapter).

Editors also struggled to find reviewers who would accept this task and complete their assignment quickly even under stressful conditions. This difficulty caused a prolongation in the acceptance of manuscripts and the frustration and anger of authors. From the point of view of reviewers, those perceived to be experts in the field were “inundated” with requests and the strict deadlines posed the risk of lowering the quality of the review and the spreading of inaccurate, potentially dangerous information (14). Some publishers addressed their reviewers with a note showing understanding of the difficulties encountered by reviewers and offering flexibility by postponing the deadlines and specific updated guidelines.

On 27 April 2020, a COVID-19 Publishers Open Letter of Intent for Rapid Review (15) was announced by a group of publishers and scholarly communications organisations to maximize the efficiency of peer-review during the pandemic. This initiative, initially comprising of eLife, Hindawi, PeerJ, PLOS, Royal Society, F1000 Research, FAIRsharing, Outbreak Science, and PRereview, supported by the Open Access Scholarly Publishers Association (OASPA), aimed at ensuring that the key works on COVID-19 were “reviewed and published as quickly and openly as possible” (16). The signatories invited researchers who were willing to conduct a rapid peer-review of COVID-19 submissions to voluntarily enter the list of potential reviewers.

As this initiative strongly underlines, the peer-review must remain rigorous and efficient, although rapid and open. A question then arises: would these new circumstances impact the quality and integrity of peer-review? During the recent EASE Virtual Conference held in June 2020 it was debated whether “it is acceptable to reduce quality assurance processes in order to fast-track important research in times of crisis” (17). This delicate matter will be further discussed in the scholarly publishing community.

Two retracted papers published in *The Lancet* (18) and in *The New England Journal of Medicine* (19), reporting studies on hydroxychloroquine based on the same

datasets which proved to be unreliable, clearly show the danger of a publishing system working under pressure. In its retraction note *The Lancet* apologised recalling its good faith: “We all entered this collaboration to contribute in good faith and at a time of great need during the COVID-19 pandemic”.

Good faith and trust are particularly needed in times of crisis when the normal standard processes to ensure quality and integrity might necessarily be altered. Retraction Watch (<https://retractionwatch.com/>), a website tracking all retracted papers from scholarly journals, already lists, from February 2020 as to 26 July 2020, twenty-six retracted papers with COVID-19 related content; three temporarily retracted and one expression of concern.

On 10 June 2020, the Canadian Health Libraries Association (CHLA/ABSC), the European Association for Health Information and Libraries (EAHIL), the Australian Library and Information Association/Health Libraries Australia (ALIA-HLA) and the US Medical Library Association (MLA) addressed a letter to the ICMJE with the aim “to encourage journal editors to actively seek information specialists as peer-reviewers for knowledge synthesis publications and to advocate for the recognition of their methodological expertise”. The Letter, introduced by C. Lefebvre, was also published in *JEAHIL* (20).

Dissemination of research results

On 13 March 2020, the National Science and Technology Advisors from 12 countries published an open access COVID-19 Letter addressed to all Members of the Scholarly Publishing Community stating “Given the urgency of the situation, it is particularly important that scientists and the public can access research outcomes as soon as possible. The countries listed below urge publishers to voluntarily agree to make their COVID-19 and coronavirus related publications, and the available data supporting them, immediately accessible in PubMed Central and other appropriate public repositories, such as the World Health Organization’s COVID data base, to support the ongoing public health emergency response efforts” (21). The response was impressive. After a few days, more than 30 leading publishers worldwide committed to making all of their COVID-19 and coronavirus-related publications, and the available data supporting them, immediately accessible in PubMed Central (PMC) and

in other public repositories and to review and publish as quickly as possible all the research contributions related to this new virus (22). In June 2020 more than 50 publishers were adhering to this Public Health Emergency COVID-19 Initiative, as reported by the NLM (www.ncbi.nlm.nih.gov/pmc/about/covid-19/). Already during the Ebola and Zika virus outbreaks, a statement on data sharing in public health emergencies was issued (23). At that time, the journal signatories accepted to make content, related to the viruses, free to access and to publish in their journals including any data or preprint deposited for unrestricted dissemination before submission. As stated: "We've joined other global health bodies to call for all research data gathered during the Zika virus outbreak, and future public health emergencies, to be made available as rapidly and openly as possible". However, it is with the COVID-19 emergency that all the potential benefits of the open access became evident because an unprecedented global research effort was on its way and an unrestricted and immediate dissemination of search results was needed (24). Many of the publishers are making their COVID related contents only temporarily available for free on their platforms, during the course of the pandemic crisis.

The role of preprints during the COVID-19 pandemic

It is now a widespread assumption that the most noticeable change that this world health emergency brought to the scientific publication field is the rise of so-called preprints. Preprints are drafts of research papers, archived on specific platforms, that are open for public viewing without having undergone a peer review and being published. Due to their capacity of spreading research findings almost immediately, preprints have been, since the beginning of the pandemic, one of the main forms of up-to-date information (25).

Already a consolidated practice in physics and mathematics through the arXiv (<https://arxiv.org/>)

preprint server, this approach to fast dissemination of research through preprints has come to the biomedical sciences mainly through the servers bioRxiv and medRxiv. These are only the two most prominent of at least 44 different archives currently hosting biology preprints; most are non-profit, community-based repositories, although traditional publishers, such as Elsevier (owner of the preprint server SSRN, <https://www.ssrn.com/index.cfm/en/>), are also joining the preprint sector (26).

Historically the use of preprints in many fields (especially life sciences) was limited by policies adopted by many publishers of refusing to consider manuscripts which had been previously posted as preprints for publication, but in the last few years this barrier was torn down as many of the most prestigious journals have abandoned this practice (as an example of the acceptance of preprints also in traditional publishing, medRxiv was launched last year thanks to a collaboration between Yale University and the publishers BMJ and Cold Spring Harbor Laboratory Press) and so far, 173 journals allow submissions of preprints directly transferred from bioRxiv, and over 30 journals offer opt-in posting of preprints on bioRxiv after submission (27).

bioRxiv and medRxiv were already relatively established (bioRxiv was launched in 2013 and medRxiv in mid-2019) but have experienced an unprecedented level of use in the last few months with the emergence of the pandemic: as of today (July 27) they, respectively, count 1,440 and 5,521 preprints on this topic. Over the same period 35,154 COVID-19 related papers appeared in PubMed. It is interesting to underline that the number of COVID-19 preprints (6,961) as a proportion of peer-reviewed papers (35,154) published since the beginning of the year is high (19.8%) in historical context (Table 1). Although peer-review is crucial for the validation of science, the ongoing outbreak has shown that the speed with which preprints can disseminate information

	Ebola	Zika	COVID-19
Preprints	74	174	6,961
PubMed	1,641	2,187	35,154
Percentage	4.5%	7.9%	19.8%

Table 1. Percentage of preprints among scientific publications indexed in PubMed, in relation to three recent disease outbreaks. Ebola and Zika data from Johansson MD et al. (1); COVID-19 data from PubMed, bioRxiv and meRxiv July 27, 2020.

during emergencies is an added value in a peculiar situation where the immediacy of information has become essential for decision making (28).

The lack of peer-review revision for preprints can bring issues of credibility and misinformation, in many cases unintentional. This particular drawback has been highlighted during the ongoing pandemic, especially after the famous withdrawal, from the preprint server bioRxiv, of a study (29) claiming that COVID-19 contained HIV “insertions”. The withdrawal appears to have been prompted by a number of reports from scientists from around the world who had access to the study because it was placed on a preprint server and who signalled this on Twitter and on various science blogs (30).

Reflecting the changing perception of the status of preprints compared to traditional articles, PubMed has recently launched the NIH Preprint Pilot (<https://www.ncbi.nlm.nih.gov/pmc/about/nihpreprints/>) during which the National Library of Medicine (NLM) will make preprints resulting from research funded by the National Institutes of Health (NIH), and posted to eligible preprint servers (the preprint servers with the highest volume of papers relating to COVID-19: medRxiv, bioRxiv, chemRxiv, arXiv, Research Square, and SSRN), available via PubMed Central (PMC) and, by extension, PubMed. In this first phase, the NIH Preprint Pilot aims to focus on increasing the discoverability of preprints with NIH support relating to the SARS-CoV-2 virus and COVID-19.

Another interesting example of the interconnection between the traditional publishing system and the “innovative” publishing system related to preprints is the new MIT Press open-access journal intended to review COVID-19 preprints on a fast-tracked timeline, in an effort to stop the spread of misinformation. This new publication, *Rapid Reviews: COVID-19 (RR:C19)*, (<https://rapidreviewscovid19.mitpress.mit.edu/>) will use artificial intelligence to identify the preprints that are of most relevance to health officials, clinicians, and the public. After being screened by a group of volunteers, manuscripts will be evaluated by up to three reviewers in a matter of days, and the resulting review will be made publicly available (31). Preprints which are positively reviewed will then be given the option of being included in a so-called “overlay journal” (32), which assigns them a DOI and other “publication data”

allowing them to be cited on the same footing as conventionally published articles.

What seems to emerge from all the new publishing initiatives linked to the COVID-19 crisis is the emergence of a “fluid” publishing ecosystem where preprints are bidirectionally linked to peer-reviewed papers, which in turn are bidirectionally linked to post publication comments, updates and amendments (33); preprints will thus continue to complement published papers, rather than competing with them (34). Like other trends associated with the current pandemic (such as the increase in remote work, virtual meetings, and telemedicine) this is a development that has been underway for some time but has been dramatically accelerated, quickly moving from a marginal position to a central one.

Submitted on invitation.

Accepted on 8 September 2020.

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Printing in a pandemic: the makers response to COVID-19

Mike Boyd

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Abstract

uCreate Studio is the University of Edinburgh's Community Makerspace. The uCreate Studio team worked throughout the COVID-19 lockdown, collaborating with other local teams to produce personal protective equipment (PPE) for staff in the National Health Service locally. This paper describes the work of the uCreate Studio team and how they used their skills, knowledge, network of contacts, and the specialist equipment in the uCreate Studio in the production of PPE.

Key words: makerspace; additive manufacture; 3D printing; Creative Commons.

Introduction

I was delighted to be asked to write an article for *JEAHIL* on our efforts manufacturing emergency PPE, although I must confess, I feel a little out of my comfort zone too. I don't have a background in the medical sector and – like many other makers and makerspaces – the COVID-19 epidemic has resulted in the uCreate Studio Makerspace staff and myself working far more closely with the health sector than any of us ever expected to.

Edinburgh University's Makerspace

I manage the uCreate Studio (1) at the University of Edinburgh, a community Makerspace available to all staff and students. The makerspace houses a wide range of new and transformative technologies and provides training and support in their use. Technologies range from the traditional (such as hand tools and metal casting) to the cutting edge (including Digital Manufacture, 3D scanning and Virtual and Augmented Reality).

Situated in the Main Library, the services the makerspace provides are freely available to any University of Edinburgh library user; equally used by students (to apply the skills and theories they learn in their studies); teaching staff (for the provision of practical and skills development course components); academics and researchers (to access new research tools); student societies and start-ups (for meetings

and project space); and inventors and makers (to explore new ideas, discover new technologies and indulge in their favourite pastimes). We are deliberately nonprescriptive – prioritising the acquisition of new digital skills; the testing of new ideas; and the promotion of interdisciplinary collaboration – and are proud to have membership from all schools within the University.

3D printing and PPE

In the early stages of the COVID-19 epidemic, the UK makerspace services took on a new role. It became apparent that personal protective equipment (PPE) supplies were low throughout the country, and that new PPE sources were needed urgently. Makers across the world were working on their own solutions to the problem and several designs were created for face shields that could be manufactured on consumer grade 3D printers.

3D printing has grown in prominence and captured imaginations all over the world as a tool to allow quick and easy home manufacture of an infinite number of objects. In the health sector they see use for applications as wide ranging as the manufacture of prosthetic arms (2), dental implants (3), tissue engineering scaffolds (4) and bespoke surgical guides (5). Their utility makes them an extremely popular tool in a maker's armoury, their affordability (reasonable quality consumer 3D printers can now be bought for

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well under £200) make them extremely common and widespread.

As with many makerspaces they are a critical technology in the uCreate Studio and so an area our staff have devoted significant time in developing expertise in over the past few years. Student demand has seen us build up a large stock of hardware and so, as it became apparent that 3D printing offered the best solution to plug the PPE gap quickly, we felt well placed to be able to contribute to the cause (*Figure 1*).



Fig. 1. Makerspace Coordinator Anthony Middleton separating stacks after printing.

Community response

By the time we returned to the Makerspace in early April, we were already plugged in to the community efforts in Edinburgh and the South of Scotland. Members of the Edinburgh Hacklab (6) – a private makerspace in the city – had been hard at work prototyping the various open source visor designs available. These had been submitted for review by the National Health Service (NHS) staff and feedback had led to the selection of the most popular and efficient designs. Other University, community and private facilities had dedicated their hardware to the cause and a print farm had been established in the city's Summer Hall. Printers had been modified to eject completed visors from the print bed and restart the printing process automatically. Allowing the machines to run 24 hours a day, 7 days a week, local charity organisations, such as Street Assist Edinburgh, had become delivery services: distributing face shields to hospitals on request (7).

We quickly transferred our suitable printers to the Summerhall print farm and kicked the rest into action. While organising safe return to the Makerspace was underway my colleagues and I had used our home 3D printing hardware to test and refine the existing design to allow the printing of visors in bulk, stacked one on top of another in batches 36 high, each separated by a hair width so they could be broken apart with little resistance.

At peak we were producing roughly 250 visor frames per day in the makerspace which were added to the greater stock being produced by Edinburgh Shield Force – the collective that had formed in the city. By 21 April 2020 - in little under a month since the crisis took hold-10,000 face shields had been produced and delivered to healthcare workers and hospitals throughout Scotland by the group (8).

These efforts, combined with hundreds of similar approaches across the United Kingdom, utilised the rapid speed of manufacture made possible by 3D printing to plug an emergency gap and ensure hospitals were provided with urgent supplies while mass production geared up and government sourced PPE began to re-enter the system. PPE supplies appear relatively stable for now, and our printers have since moved on to supporting the creation of bespoke hardware for the NHS and testing apparatus for medical research teams within the University but as with makers and makerspaces across the country, we're ready to ramp up PPE production again at a moments' notice.

Creative Commons for the common good

Key to the success of the project was the Creative Commons (10) and the internationally collaborative approach it facilitated. Designs were rapidly created, shared, prototyped, and improved on as an iterative process, pulling in expertise from across the globe.

The 3DVerkstan visor (11) manufactured in the uCreate Studio had been modified by Edinburgh Hacklab (an ingeniously practical change (12) to the design shifting the mounting pins for the protective transparent front by a few mm, allowing for a standard UK hole punch to be used for manufacturing transparent fronts). In turn we altered the design further to allow it to print successfully in stacks. As

with the optimised designs before ours, the modified model has since been shared with print settings, project files and tips for post processing (13). Making reuse of our work easy for other teams across the world. Our design has no doubt been improved upon since, modified further to suit the needs local to its producers.

Since it was enacted in 1998 Creative Commons has proved a powerful tool for collaborative, community, and common good work activities. With the development of the designs for PPE it provided a mechanism for hundreds of makers and experts from a variety of fields to work simultaneously on a problem in which time was of the essence. It ensured that the fruits of their labours were available to everyone as quickly and freely as possible. A massive, global community effort in which the mechanisms were in place to allow experts from every required field to contribute freely to the project to ensure all makers could manufacture PPE quickly, efficiently and to a shared standard.

The wider community

"It was great being able to contribute to EdinburghEMS where everyone has different skills and is working towards the same goal. Whether we needed a custom database set up for tracking PPE orders or an injection mould to be designed and optimised, there was someone on the team that had experience with it or knew someone that did!"

Miron Zadora, Director, Edinburgh Hacklab (14)

Throughout the pandemic, we have been in contact with uCreate Studio makers manufacturing PPE in their own projects:

The Edinburgh Hacklab – the driving force in drawing together Edinburgh's maker community to form Shield Force has Miron Zadora among its directors, previously a student technician at the uCreate Studio. Miron and his colleagues have since gone on to form the PPE Collective (15) dedicated to producing and developing PPE in the UK using ethical and sustainable practices.

In Canterbury uCreate Studio maker and University of Edinburgh undergraduate Edward Shapcott co-formed his own team of PPE producers. The team

crowdfunded their production, supplying thousands of face shields to carers and charitable organisations across the city.

In London, University of Edinburgh student start up and uCreate makers Augment Bionics (16) had established their own 3D print workshop. As a medical tech start up focused on affordable bionic prosthetics, the team would move quickly from 3D printing into injection moulding for mass production. To date, they have produced and donated almost 120,000 face shields, sending them as far afield as Armenia, Uganda, Zimbabwe, Somalia, and Somaliland (17). Seeing students and staff who had developed their maker skills in the uCreate Studio form their own bases of manufacture has been an immense source of pride for us as a service, but also provide evidence of the importance of library makerspaces and the skills they develop. Since first opening to Makers in January 2017, the uCreate Studio has seen a diverse range of outputs and projects carried out by its makers (18). As an experimental space, these have typically been initial low risk, prototypes. By design, projects will tend to mature to more advanced facilities before their true impact is felt and so directly measuring and communicating this impact has proved tricky in the past. In providing skills development opportunities to students that have since allowed them to support the NHS in a time of critical need. The importance of the digital skills developed in makerspaces and the impact they can have has never been clearer.

Conclusion

Makerspaces foster a range of practical, creative, and professional skills. They promote collaboration, innovation, and action. They can be used to surface new technologies quickly, to democratise access to tools and technologies with demonstrable potential to change the world for the better; and to empower people with the ability to have a direct material impact on the world around them.

In Libraries their access and availability can be maximised (19). They are treated as a resource that is useful to everyone. For centuries libraries have provided and promoted access to knowledge and ideas which pave the way for progress and innovation.

Library makerspaces let us do the same with digital skills and new technologies. The greater the prevalence and the wider the access, the more positive impact the new industrial revolution is likely to have on how we live, work and play.

*Submitted on invitation.
Accepted on 3 August 2020.*

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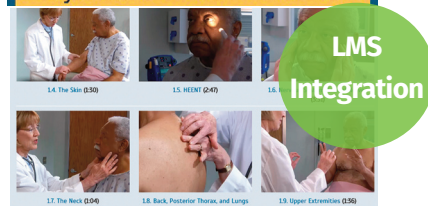
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Letter from the President



Maurella Della Seta

Istituto Superiore di Sanità (retired)
Rome, Italy
Contact: maurella.dellaseta@iss.it

Dear EAHIL colleagues,

Here I am again, at our usual *rendezvous* on the pages of *JEAHIL*, after the summer holidays, which I hope were spent in the best way for all of you.

This was the first year in which, due to the COVID-19 emergency, it was not possible to meet in person during our annual meeting. I missed a lot this opportunity, as I would have been very happy to meet EAHIL colleagues, and especially the Polish ones, who worked so hard for organizing the Łódź Conference, but I am sure that there will be more future face-to-face meetings, as we all wish. Nevertheless, the life of our association has continued with the usual commitment. The Executive Board met online several times, on a regular basis, to address the new needs caused by the pandemic and to better carry out all pending activities.

Results of the Elections for President and Board

Voting for the EAHIL President and Executive Board positions from 2021 took place in June 2020. There was one candidate standing for President, and ten candidates standing for four executive positions (plus two co-opted members) in the EAHIL Board.

I have the pleasure of informing you that Lotta Haglund from Sweden (who has been the vice-President in the last four years) was elected as the new EAHIL President for 2021-2022. I am looking forward to collaborating with Lotta in the next two years in the role of Past President. Best wishes, Lotta, and congratulations on your new assignment within EAHIL.

Lotta Haglund will be able to rely on the valid collaboration of the four colleagues elected for 2021-2024, within the Executive Board, namely:

- Alicia Fatima Gomez Sanchez (Spain)
- Witold Kozakiewicz (Poland)
- Aoife Lawton (Ireland)
- Francesca Gualtieri (Italy)

The Executive Board has decided to co-opt for 2021-2022 the following colleagues, who, I am sure, will bring their valuable contribution as well:

- Petra Wallgren Björk (Sweden)
- Astrid Kilvik (Norway)

As EAHIL is legally registered in The Netherlands, Marion Heymans (Netherlands) was offered an administrative position to act as a liaison person between the association and Dutch institutions such as banks and Chambre of Commerce.

NEWS FROM EAHIL

I wish to express my thanks to all the colleagues who were willing to give their time and effort to support EAHIL on the Board, including those who were not elected. We were very happy to have a healthy number of candidates for this election! I offer my congratulations to all new and re-elected colleagues. Welcome to the Board and best wishes for your activity.

Elections for Council members

The election process for Council members for each country where there will be vacancies from 2021 will start shortly – please look out for emails calling for candidates. The new Councillors will begin their terms in January 2021. You are strongly encouraged to consider becoming a Councillor for your country or suggesting possible candidates among your colleagues. Please consult the EAHIL website and social media for more updated information.

17th EAHIL 2020 Conference in Łódź, Poland – Registration open

All of you are probably aware, from the EAHIL website and from EAHIL social media, that the Local Organising Committee for the 17th EAHIL Conference in Łódź, Poland, decided to deliver the Conference as an **online event**. The virtual EAHIL 2020 Conference will take place on **16-18 November 2020** and will replace the Conference that was going to be held by the Information and Library Center of the Medical University of Łódź in Vienna House Andel's Łódź conference hotel. Both EAHIL Board and Council meetings will be online, while remote participation and voting for the General Assembly will be organized concurrently with the Conference in November. It will be possible to take part in the different sessions **via the Zoom platform**.

All information about the virtual Conference can be found here:

<https://eahil2020.com/>

The Conference programme is available here: <https://eahil2020.com/schedule/>. The abstracts of the presentations and posters will soon be uploaded to the same website.

The main theme of the 17th conference is Open Science, with a focus on topics such as **open access, professional collaboration, and innovation**.

A big thank you to the Local Organizing Committee for their great efforts in allowing us to follow the virtual conference.

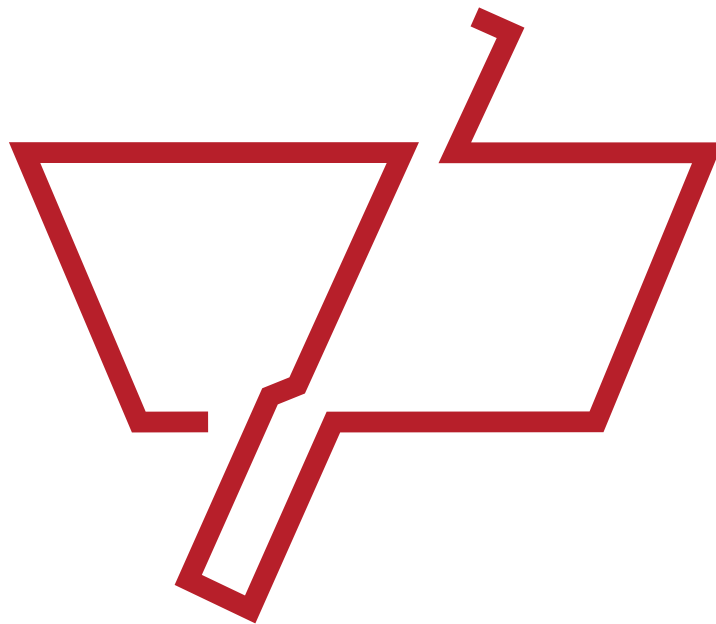
I really hope to have the opportunity to meet you online in November

Maurella



Fig. 1. EAHIL Board meeting online in June 2020.

EAHIL



2020

B e **O** p e n
A c t **T** o g e t h e r

17th EAHIL Conference

16—18.11.2020

Łódź—online

Dear EAHIL Community

The International Programme Committee and the Local Organising Committee for the **17th EAHIL Conference** are pleased to invite you to **EAHIL 2020 Online Conference** that will take place on **16–18 November 2020** on ZOOM platform.

The main theme of the conference is Open Science: **Be Open, Act Together** and we have prepared for you a rich and engaging programme. You can choose from 4 online interactive workshops and 25+ online presentations. **EAHIL 2020** keynote speakers will be **Daniel Margocsy (Cambridge University)** and **Natalia Manola (OpenAIRE)**. 2 online continuing education courses (CECs) will take place on 19 November 2020. We have included 2 social events that will also take place in a virtual format.

The detailed schedule is available for you at our website: **www.eahil2020.com**

The registration for **EAHIL 2020 Online** is open – you will find the registration form at: **www.eahil2020.com/registration/**

Attending the **17th EAHIL Conference** will give you the opportunity to open your mind to new ideas, acquire new knowledge and skills and learn from the experience of fellow librarians and information specialists from all around the world.

We very much look forward to seeing you this November online!

Stay updated at:

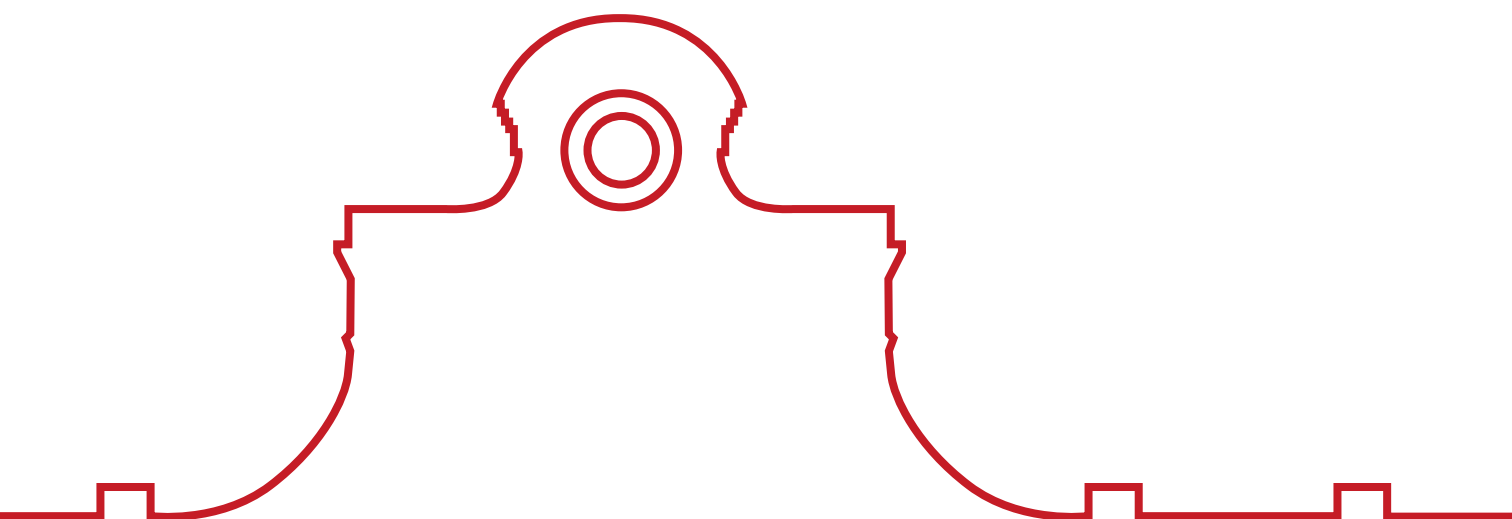
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Dear EAHIL Colleagues and Community,

On behalf of the Marmara University Rectorate and International Program Committee & the Local Organizing Committee it is a great pleasure for us to invite you to the EAHIL2021 Workshop in İstanbul. EAHIL2021 Workshop will be hosted by Marmara University on 5–8 July 2021. The main theme of the workshop is ***“Crossing the Bridge: New Challenges, New Opportunities”*** The Bridge is connecting Europe and Asia and it’s a symbol of İstanbul. The idea of a bridge crossing the Bosphorus dates back to antiquity and its a link between the continents. COVID–19 has turned the world upside down and many things have been impacted in the world this is another link for us. The International Program Committee of the EAHIL2021 specified six thematic areas within this scope. The subthemes include but are not limited to the ***Physical and virtual, Education and literacy, Communication and publication, Data and research, Evidence and resources, Innovation and services.***

Due to the pandemic, the EAHIL2021 Workshop will be held as a hybrid event and combine both in person and virtual experiences. The sessions will be held face-to-face with a certain number of participants, and online participants will also be provided. This hybrid workshop experience will give you so many new insights, ideas, and best experiences in the real and the virtual world with presentations, interactive workshops, plenary sessions, continuing education courses, poster exhibitions, social and cultural activities.

We will deliver a dynamic, enriching and memorable experiences in İstanbul. Marmara University is one of the oldest educational institutions in Turkey. Rectorate of Marmara

University at Sultanahmet Square (Hippodrome of Constantinople) in the Fatih district of İstanbul. Marmara University is located in the heart of the city, an area very close to the historical places and very well served by road links and public transport. The venue of EAHIL2021 will be Ord. Prof. Dr. Nihad Sayar Meeting Hall which is in the Rectorate of Marmara University Building at Sultanahmet Square. You have a chance to visit Hippodrome, Blue Mosque, German Fountain , Hagia Sophia, Grand Bazaar, Hagia Irene Church, Topkapı Palace, Petit Hagia Sophia from the venue by walk very easily. We are very excited to be able to come together face to face at this meeting. Taking into account the importance of the COVID-19 outbreak, the necessary preparations have been identified. EAHIL2021 Workshop will be held by paying attention to the necessary hygiene and social distance rules.

We would like to invite you to our beautiful İstanbul which is the meeting point of continents, cultures, arts, history and science for 2021.

Asst.Prof. Güssün GÜNEŞ
EAHIL2021 Chair of the IPC &LOC Committee

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MY COVID-19 STORY #YOUTHOFUNESCO

Dear Friends,

I would like to use the UNESCO Website's words to talk about young people at the time of COVID-19.

*Browsing the web, I came across the UNESCO webpage launching **My COVID-19 Story #YouthOfUNESCO campaign**. Intrigued by it, I decided to explore and then share it. As you probably read, some media have reported negative actions or stigmatised youngsters for their behaviour in response to COVID-19. Some headlines actually told "Young people don't respect confinement", "young people don't care about spreading the virus" or similar titling.*

"Yet", you can read on the campaign page, "young people are day-in-day-out proving to be key actors when it comes to finding solutions to global problems – from the fight against discrimination, climate change, gender equality, and many other issues. Today, at a time of an unprecedented health crisis [..young people..] are again on the front line. More and more of [..them..] appear to be pioneers when it comes to inventing new forms of solidarity".

Then what? With a smashing initiative, UNESCO set up an open invitation to all young people to share their COVID-19 stories and inspire us all. Pen lovers can share their story through a short text entering their testimonials in a [template](#). Multimedia lovers can instead share their own story through a short video, recording and submitting it while following simple instructions.

I found this initiative merely brilliant, as I believe the world should hear about young people's experiences of this pandemic. There's a lot to know about their actions taken, creative ideas developed to face this hard time, help lent to communities, innovative learning ways found, positive spirit kept while taking care of their relatives and loved ones, and who knows what else.

Take a look at the Inter-Agency Youth Network Development (IAYND) Statement on COVID-19 and Youth, a freely [downloadable](#) support resource, pass the word, invite people to join and, as usual, enjoy the [full reading](#)!

JOURNAL ISSUES

Health Information and Libraries Journal: Contents of September 2020 (Vol. 37, Issue 3; Pages: i-iv, 171-249)

Editorial

Health literary and COVID-19

Spring H

Review Articles

Health information seeking behaviour: a concept analysis

Zimmerman MS, Shaw G Jr

Original Articles

- **Screening everyday health information literacy among four populations**
Hirvonen N, Enwald H, Mayer AK, Korpelainen R, Pyky R, Salonurmi T, Savolainen MJ, Nengomasha C, Abankwah R, Uutoni W, Niemelä R, Huotari ML
- **Improving patient engagement by fostering the sharing of activity tracker data with providers: a qualitative study**
Shin GD, Feng Y, Gafinowitz N, Jarrahi MH
- **Peer-led information literacy training: a qualitative study of students' experiences of the NICE Evidence search Student Champion Scheme**
Aylward K, Saffi L, Weist A
- **Performance evaluation of three semantic expansions to query PubMed**
Massonnaud C, Lelong R, Kerdelhué G, Lejeune E, Grosjean J, Griffon N, Darmoni SJ

Regular Feature

- **Dissertations into Practice**
Library Jargon Creates Barriers for Potential Users of Health Library and Information Services
Kiely H
- **International Perspectives and Initiatives**
The Covid-19 'infodemic': a new front for information professionals
Bin Baem S, Bhatti R

Teaching and learning in Action

- **Librarians collaborate successfully with nursing faculty and a writing centre to support nursing students doing professional doctorates**
Bernstein M, Roney L, Kazer M, Boquet EH

Virtual Issue 2020 Editorial

- **FREE ACCESS**
Health information professionals: delivering core services and value in extraordinary times
Johnson F

FROM THE WEB

- **Cochrane announces new 10-year publishing agreement with Wiley**
Cochrane is announcing the signing of a new contract with John Wiley & Sons, Ltd. Starting January 2021, it will establish the publication of the Cochrane Library for the next 10 years. The agreement aims at guaranteeing important investment to sustain Cochrane as one of the world's leading collection of high-quality evidence in support of healthcare decision-making.
To say it with Jay Flynn words, Senior Vice President and Chief Product Officer, Research at Wiley "Cochrane is the world-leading provider of medical evidence to support clinical effectiveness. We are confident this new agreement provides a strong framework within which to sustain Cochrane's success and advance its future growth."
Read more about [Cochrane's future publishing agreement with Wiley](#)

A BRIEF HISTORY OF HUMAN CORONAVIRUSES

Shawna Williams, senior editor of The Scientist from 2017, worked as a freelance editor and writer, and in the communications offices of several academic research institutions. She currently oversees The Scientist's social media channels and edits the Modus Operandi, Literature, and Foundations sections of the magazine. On June 2nd she published the interesting post on The Scientist's News and Opinion web page "A Brief History of Human Coronaviruses". Now we are a long way ahead from that time, and much more is known

about SARS-CoV2 and COVID-19. However, what is still interesting and useful together with the [full article](#), is the interactive [downloadable](#), clickable PDF "Human Coronavirus Discoveries".

Give it a try!



MEET THE BOOK

David Bainbridge is a Clinical Veterinary Anatomist at Cambridge University. His interests extend into humans, probably the most mysterious species of all. Actually, his books cover many topics among which pregnancy, the evolution of the brain, the art of anatomy, the genetics of sex, and the development of teenagers. His is an unconventional viewpoint that can fascinate and tell us much about ourselves and the living beings it describes.

Bainbridge's last book, *How Zoologists organize things*, explains how human kind's attraction with the animal kingdom began as a matter of survival – differentiating the edible from the toxic, the ferocious from the tractable. The book uncovers wild truths and myths about animals, revealing how much more there is to learn.

Long before Darwin, researchers were preoccupied of finding similarities and differences between the animals. They could sense there was an order that unified all life and formulated a variety of schemes to help illustrate this. This pursuit of the classification of living beings has left us with a rich artistic legacy, from the ancient and Medieval world through the naturalistic cataloguing to the current, computer-generated classificatory tangle.



Bainbridge leads us through this process. Wonderful, zoological charts reveal the predominant trends of artistic and scientific discoveries through the ages and tell us much about ourselves the creatures portrayed.

SOME INTERESTING FORTHCOMING EVENTS:

October 13-16, 2020 - ONLINE

EBLIDA Online Workshops "Think the Unthinkable"

Info: <http://www.eblida.org/eblida-online-meetings-2020/eblida-online-workshops-2020.html>

October 28-30, 2020 – (originally in Chicago, USA) - ONLINE

Guideline Development. A Virtual Learning Workshop: GRADE for rapid reviews and recommendations

Info: <http://gradeconf.org/2020-10/>

Letizia Sampaolo

November 16-18, 2020, (originally in Łódź, Poland) - ONLINE

EAHIL 2020 Online Conference

Info: <https://eahil2020.com/registration/>

January 22-26, 2021 - ONLINE

American Library Association Midwinter Virtual Meetings and Exhibits

Info: <https://2021.alamidwinter.org/>

May 26-28, 2021 Chicago, IL, USA

Guideline Development Workshop: GRADE for rapid reviews and recommendations

Info: <https://gradeconf.org/2021-05/>

June 24-29, 2021, Chicago, IL, USA

American Library Association Annual Conference

Info: <http://www.ala.org/conferencesevents/>

June 21-25 2021 Pretoria, South Africa

ICML + AHILA

<https://icml2021.org/>

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



2021 CONGRESS
Pretoria, South Africa
21-25 June 2021

The International Congress of Medical Librarians (ICML)
+
Association for Health Information & Libraries in Africa (AHILA)



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"A call for action: Engaging to save lives."

ICML and AHILA are pleased to invite you to the 2021 Congress which brings together medical librarians, academics, researchers and other professionals from a wide range of disciplines.

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IBAN NL08 ABNA 0530364697 - BIC ABNANL2A

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