



## Bilgi Yönetimi Dergisi

Cilt: 5 Sayı: 2 Yıl: 2022

<https://dergipark.org.tr/pub/by>



Peer-Reviewed Articles

Research Article

### Article Info

Date submitted: 06.06.2022  
Date accepted: 22.12.2022  
Date early view: 27.12.2022  
Date published: 30.12.2022

### Makale Bilgisi

Gönderildiği tarih: 06.06.2022  
Kabul tarihi: 22.12.2022  
Erken görünüm: 27.12.2022  
Yayınlanma tarihi: 30.12.2022

### Keywords

Library Services, Library  
Closure, Coronavirus

### Anahtar Sözcükler

Kütüphane Hizmetleri,  
Kütüphane Kapatma,  
Koronavirüs

### DOI Numarası

10.33721/by.1126938

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## Rethinking Library and Information Services amidst Virulent Covid-19 Global Pandemic

*Covid-19 Küresel Pandemisinde Kütüphane Hizmetlerini  
Yeniden Düşünmek*

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### Abstract

The COVID-19 global pandemic is a huge learning curve and an opportunity for librarians to renew their interest in what support libraries can offer in times of disaster. The pandemic, with how serious it was, showed how relevant and not obsolete the library is, as some people tend to think. This paper sought to provide an in-depth account of new and innovative library services in response to the pandemic. The pandemic generated a lot of concern among the populace, and people desperately need relevant and curated information to stay calm, safe, and healthy. People would only remain vulnerable to the onslaught of the pandemic if they were not provided with access to verified information. A systematic review of the selected literature indicated that, despite the restrictions, libraries were able to integrate digital technologies into their services for the benefit of the populace. Innovative services were introduced to maintain relevance, which resulted in a continuous increase in online users' engagement. Library websites have also become a place to be for users interested in reading quality content and verifying information. Even though libraries are already reopening to users, there is still a general willingness to continue with online services.

### Öz

Kütüphaneciler açısından Covid-19 süreci kütüphanelerin olağanüstü durumlarda nasıl hizmet verebileceğine dair önemli bir öğrenme süreci oldu. Salgın sayesinde kütüphanelerin –bazı insanların düşündüğü gibi- kullanılmayan, modası geçmiş yerler olmadığı anlaşıldı. İnsanların bu süreçte sağlıklı ve güvende kalabilmek için konuyla ilgili güvenilir ve derlenmiş bilgiye ihtiyaç duymasıyla kütüphanelerin önemi bir kez daha anlaşıldı. Salgın dönemi boyunca, kütüphanelerin kullanıcılara sunduğu bilimsel ve dolayısıyla kanıtlanmış bilgiler olmasaydı birçok insan virüse karşı tamamen savunmasız olarak kalacaktı. Bu makalede Covid-19 salgını sürecinde kütüphaneler tarafından sunulan yeni ve yenilikçi hizmetler değerlendirilecektir.

Çalışma kapsamında yapılan literatür değerlendirmesi sonucunda salgına ve kısıtlamalara rağmen, kütüphanelerin sundukları hizmetlere dijital teknolojileri entegre ederek bir şekilde hizmette sürekliliği sağladığı görülmüştür. Bu durum kütüphanelerde yenilikçi hizmetlerin kolaylıkla tanıtılmasına, bu da çevrimiçi kullanıcıların sayısının günden güne artmasına imkan vermiştir. Tüm bu süreçten sonra kütüphane web siteleri kullanıcılar için bilimsel ve kanıtlanmış bilgiye erişim sağladıkları yerler haline gelmiştir. Bu nedenle kütüphaneler açılmasına rağmen, kullanıcıların hala çevrimiçi servislere yönelik taleplerinin devam ettiği görülmüştür.

## 1. Introduction

A novel contagious communicable respiratory disease called the coronavirus (2019), commonly known as COVID-19 and clinically as SARS-CoV-2, is a respiratory virus. Acute fever, breathing problems, coughing, loss of smell, tidiness, muscle discomfort, and additional symptoms that have not yet been scientifically verified are only a few of the symptoms caused by this novel coronavirus strain that infects people. The virus is highly contagious and spreads through droplets from an infected person's cough, exhale, and sneeze if the droplet comes into contact with something or someone and the person touches his or her nose, mouth, or eyes with the hand that picked up the virus from the infected surface. In Wuhan, Hubei Province, China, COVID-19 was first identified during a respiratory sickness outbreak. On December 31, 2019, cases of the illness were reported to the World Health Organization (Zhu, Zhang, Wang, Li, Yang, & Song, 2020) A global pandemic was declared on March 11th, 2020, as a result of a critical examination of the outbreak and the pace with which the virus moved across borders and regions (Centers for Disease Control and Prevention, 2020; Ramzy & McNeil, 2020).

The first three days are when the virus is most contagious, even in a patient who appears to be asymptomatic. Older people and people with underlying medical conditions, including diabetes, cancer, and cardio-respiratory diseases, among others, can develop complications like pneumonia and acute respiratory distress syndrome. Healthy individuals infected with the virus are likely to develop a mild to moderate respiratory infection, and they have a high likelihood of recovery with or without receiving special treatment (International Federation of Library Associations and Institutions, 2020). In enclosed air-conditioned rooms, aerosols that remain suspended in the air can transmit the virus, which is the reason why the World Health Organization declared the virus airborne in October 2020 (Laaro, 2021; World Health Organization, 2020). Millions of lives have been lost due to the COVID-19 pandemic, and the consequences of this devastating pandemic are still being felt around the world. It has been difficult and traumatic, to the point where even survivors are still writing in despair. The virus arrived, decimated everything, and left humanity in fear, despair, hunger, and economic ruin. There has been no peace in the world since the virus spread from Wuhan in the winter of 2019, since it has touched all aspects of existence. However, it became increasingly perplexing and debilitating in the early months of 2020.

The global pandemic of COVID-19 and the subsequent lockdown touched practically every aspect of human endeavor. Every area of the economy is affected, as are the operations of every profession. Meanwhile, libraries are also not immune to the pandemic's effects, as librarians' work ethics and operations had to be re-engineered to adhere to the new normal posed by the COVID-19 pandemic. Libraries were closed at first, with some reopening with only essential staff and others working from home. The pandemic demonstrates the necessity for digital and virtual information sources and services (Alajmi & Albudaiwi, 2020). Going digital connects with the information package, while going virtual pinpoints the technique of dissemination and communication. The pandemic reveals certain long-standing library challenges, which revolve around the digital divide produced by social exclusion, inadequate information infrastructure, and resources orchestrated by the library's long-standing insufficient budget.

Libraries are poised to help users adapt to change—a foundation to expand service reach (Tait, Martzoukou & Reid, 2016). How libraries respond to the pandemic's challenges demonstrates how relevant and not obsolete libraries are, as some incorrectly believe. Drawing from experiences around the world, libraries from different parts of the world are facing varying degrees of difficulties, ranging from complete closure to re-opening to broadly maintaining full services. Even though libraries are reopening, things are still not back to normal, especially now that we are in the fourth wave with a new variant of

COVID-19 being discovered. When the COVID-19 pandemic broke out in 2020, libraries all over the world were forced to go through a series of service restructuring phases, the most common of which were closure, reopening, and adaptation to the new normal (Kang, Song, Lu, Shi, & Yang, 2022). The initial measures to stop the virus from spreading resulted in widespread closures, but this did not mean that libraries ceased serving users' information needs. Instead, the pandemic presents opportunities for innovative library services that redefine new online services that could be delivered in addition to those already available. During the pandemic, library information services were built on four main elements: rearranging library space and facilities; sanitation; rethinking library services to encourage remote access to information; and health-preventive safety precautions.

This is essentially a review article in which researchers systematically evaluate relevant literature to help understand the opportunities and constraints that the COVID-19 pandemic presented for innovative and creative library services. Researchers consult recognized databases and information sources, such as Google Scholar, ResearchGate, and ProQuest, to conduct the review. Thirty four documents were selected as eligible for the review after the final selection and rigorous evaluation of relevant literature. In order to learn from the COVID-19 experience, prepare for potential catastrophes, make more informed decisions about uninterrupted service improvement in libraries, and add to the body of knowledge about libraries' responses to crisis events, this review article tracked and documented changes made and innovative library services introduced in libraries during the pandemic. It especially aims to respond to the following research questions:

1. What health-prevention protocol and guidelines are in place for the library's reopening after the initial lockdown?
2. What services did the library provide during the pandemic?
3. How are libraries meeting the information needs of diverse users with varying demographic characteristics during the pandemic?
4. What are the challenges mitigating against effective library creativity and innovative services during the pandemic?

## **2. COVID-19 Health Preventive Protocol in the Library**

Libraries strictly abide with COVID-19 safety regulations and public health guidelines, to ensure the safety of patrons while still providing access to information. In order to provide library services during COVID-19, it is always of the utmost importance to protect the safety and well-being of the staff and the users. The COVID-19 protocol and guidelines encouraged social distance and avoided physical contact; hence, it was necessary to re-enforce contactless services in libraries (Fasae, Adekoya & Adegbilero-Iwari, 2021). The majority of libraries' services have been moved to online environments via web-based information services, with only a few remaining in physical environments across the globe (Dadhe & Dubey, 2020). As part of a strategy to avoid the virus from spreading further, library chairs are being rearranged to preserve social distance.

Studies have proven that book surfaces are infectious for one to nine days after contact with a coronavirus (Australian Library and Information Association, 2020). Since some library materials, especially those in print, pose a risk for COVID-19, library staff must take proactive steps to ensure that the space, resources, and facilities are secure. Even though libraries are reopening, life is not yet back to normal as it was before the pandemic. More so, now that we are in the fourth wave with a new variant of COVID-19 being detected, staff and users' safety should be protected by ensuring library surfaces, materials, and facilities are constantly sanitized; staff and users should be made to wear a facemask compulsorily; the number of users at a time should be reduced to a minimum to maintain social distancing; and also, measures are to be taken to have users' hands washed or sanitized before they are allowed in the library. Quarantine policies are applied to returned library books. As physical libraries are reopened, safeguarding the health and well-being of library staff and users has become a priority. A glass shield that protects library staff from having physical contact with users and other staff is built into some libraries, especially in developed countries.

It is recommended that sick library personnel and patrons take the COVID-19 test, self-isolate for 14 days, seek medical attention through the proper channels, and take some time to recover before returning to the library. Walls, plastics, wood, and metals other than copper, which are risk-associated surfaces in the library, are thoroughly cleaned and sanitized. Therefore, among library personnel and patrons, respiratory etiquette such as coughing into a flexed elbow or using disposable tissues is recommended, while touching of nose, eyes, and mouth should indeed be avoided (IFLA, 2020). Running tap water, soap, and hand sanitizer are available at the library's entrance as part of the COVID-19 preventive strategy and reopening guidelines provided. Everyone entering the library, including staff, patrons, and other visitors, must wear a facemask. Protective screen glasses should indeed be worn to prevent physical contact between library workers and visitors. The library should exhibit an info-graphic representation that demonstrates proper hand washing method, cleanliness, social distance, and the wearing of facemasks for instruction.

### **3. Library Services During the COVID-19 Pandemic**

The global virulent COVID 19 pandemic gave libraries a chance to make improvements and increase the value of their collections. As a result, the primary emerging role for libraries is to develop infrastructure and increase accessibility and outreach in order to extend library services outside of the library's physical walls and reach as many library users as possible. Encouragement of digital culture and the conversion of library services to an online format are essential components of this feature (Harris, 2021). The pandemic presents a critical opportunity for librarians to reconsider their core values by remaining true to their calling as information community builders who aid in emotional healing and recovery. The simple fact that users still have access to information brings a valuable feeling of normalcy (Ma, 2020; Alajmi & Albudaiwi, 2020). Libraries provide information resources, library services, and programs in novel ways during the COVID-19 pandemic. Noteworthy example, is moving their services online and providing remote access to digital resources, virtual reference services like "Ask a Librarian" through their website and social media, offered contactless checkout service, providing users' mental health and wellbeing support services, and advocate against false information and misinformation (Bangani, 2021; Cox & Brewster, 2020; Abubakar, 202).

In consonance to forgoing, libraries play a crucial role in raising users' awareness of COVID-19 by offering evidence-based information from trustworthy sources on recent discoveries, new developments, preventive measures, and the development of vaccines. Libraries also offer support services to medical and clinical staff, as well as researchers who are working to find a long-term solution to the pandemic. Libraries experiment with various communication technologies to engage users during the lockdown; social media is heavily used for information sharing. Currently, libraries are working nonstop to enable remote access to collections, advertise their online presence, provide users with up-to-date information, and respond to users' inquiries. Many libraries already have significant online presences, and many more intend to get started. The current environment is being used by libraries to promote their digital offerings, reinforce their operations on social media platforms, and transition their reference services online (Bladek, 2021).

The use of information technology has aided patrons in getting timely access to resources by allowing them to access many e-books, e-journals, and other e-resources. Technological advances in library services assisted libraries in coping with the new normal and ensuring good service to users by working smartly in parallel (Devan & Tripathi, 2021). As long as the demand for print resources is strong, libraries will continue to engage users both online and offline, with health precautions in place. Just as the pandemic presents profound challenges, so too does it inspire incredible opportunities to innovate library operations like never before. It is more of an organic change or evolution over time to diversify library services. Librarians can connect with users in many contactless circulation services, such as click-and-collect modes of operation, where borrowing of library materials could be made online and picked up through lockers or home delivery through the post. Due dates are extended, and overdue fines are waived as a result of an amnesty granted during the pandemic.

Libraries have made a bold effort to contact users online through emails, phone calls, and social networking sites. With these digital services, libraries are free of space and location barriers or restrictions (Brine & Knight, 2021). The library would require technology upgrades and improved networks to provide online services. Internet connectivity ought to be a basic amenity as widely available as electricity. Wi-Fi hotspots and broadband connectivity should be essential information infrastructures in today's libraries. Libraries have to react and evolve along with the changes in society and users' expectations. When libraries reopened, they pivoted to digital information services with limited physical services, whereas users were already adapting to the new way of services, and users may have moved on by the time the library space was saved for congregating.

By facilitating community interaction, broadcasting emergency alerts, and seeking input from users, social networking sites expand library information services and communication. In order to adapt to the pandemic, social networking platforms are being used to enhance library capacity (Wang & Lund, 2020). Libraries have used social networking sites in the past as a tool for current awareness services (CAS), primarily to announce new arrivals in the library, events, and new library services, and now, with the current situation caused by the pandemic, advisory services and informational support services are also being rendered on the library's social media page. Because of their far-reaching potential for making information and announcements go viral, the value of social networking sites cannot be overstated. Situation monitoring, social cohesiveness, social feedback, therapeutic initiative, and messages that help community resilience and emergency management are all examples of how social networking sites can be valuable during a disaster or pandemic.

The library's websites and their social media handles present links to information on policy and procedural advice on COVID-19 from the World Health Organization (WHO) and other local health government agencies such as the Nigeria Center for Disease Control (NCDC) and other international health agencies. Information on local pandemic response in terms of research, frontline engagement of medical personnel, number of reported cases per state, clinical trials, fact-finding sites, expert panel interviews, test centers, and other pertinent data. Aside from general COVID-19 information, announcements on library closing and reopening, new library services, and changes in library service offerings should be provided online (Decker, 2021). Also important is the contact information of the designated reference librarians assigned to respond to users' queries online.

On the positive side of the pandemic, users were frequently provided with actionable instructions and information, such as where to seek help in an emergency, information about test centers and isolation centers, and where to get palliative and other support programs, resulting in a new vision of services that foster active relationships and constant communication (Ma, 2020). In spreading information and communicating with people, library websites that enable social networking sites such as Facebook, Twitter, Google meetings, webinars, Zoom conference meetings, WhatsApp messages, blog posts, and others are utilized. Through networking, library consortiums, and interlibrary loans, libraries have recognized the value of resource sharing.

The COVID-19 outbreak was accompanied by a plethora of information, some of which was inaccurate, some of which was only partially accurate, some of which was speculative, and some of which was actually accurate. People are overwhelmed by the amount of information available on media channels, the internet, blogs, social media, local health organizations, the WHO, and other sources. Unverified information, misinformation, grapevine information, and disinformation spread like wildfire, complicating an already devastating pandemic by encouraging some people to engage in self-harming behavior, which causes even more distress. The situation was so bad that it was dubbed an "infodemic," but by filtering and sorting overwhelming information and presenting only those sources that are verified, reliable, and up-to-date, librarians can aid in the fight against pandemic and infodemic (Chisita & Ngulube, 2022).

Because of the need for a quick response, public health policymakers and researchers are disseminating data and analysis reports gathered using sound and transparent methods to illustrate and explain the COVID-19 pandemic situation, symptoms, incubation period, transmission, cases by states and territories,

and preventive measures. On the other hand, data literacy is a type of information literacy that focuses on datasets represented in numbers, text, tables, images, charts, graphs, pictures, and diagrams. Data management, data conversion, data interoperability, metadata, data analysis, data visualization, data preservation, and data citation are all examples of data literacy (Koltay, 2014). It is easier to make a judgment based on data sets than to make a decision based on a large number of reports written in words. As a result, libraries should include data literacy as part of their information literacy program for patrons.

Library users would benefit from information literacy and other forms of allied literacy to help them manage their information environment. Information literacy is a broad phrase that refers to a set of skills needed to properly search out and locate valuable and meaningful information (Ajegbonogun & Ajegbonogun, 2015). Knowledge of the appropriate sources of information and skill in using information search techniques to access information from a variety of carriers, comprehension of evaluation and curative criteria according to applicability and quality, information use within the confines of ethical usage, and sharing and archiving information for posterity are all necessary competencies. Health information literacy, on the other hand, is the ability to recognize, analyze, filter, and apply health information to inform decisions or actions. However, in addition to general information literacy, becoming health information literate necessitates a working knowledge of medical and clinical terminologies.

#### **4. Considering Social Inclusion in New Creative and Innovative Library Services during the Pandemic**

All those who use the library's services are referred to as library users. They are the focal point of all the myriad library and information services that ultimately correspond to satisfying the information needs of all varying library users (Connaway, 2015). Users were as diverse as the types of libraries. Some library users, such as those in academic, school, and special libraries, are rather homogeneous, whereas those in national and public libraries are varied and all-encompassing. Users also come from a variety of socioeconomic and educational backgrounds; some are well-educated and smart, while others are semi-literate or illiterate. Some people are able-bodied, but a sizable portion of the population may be disabled, meaning they are visually or hearing impaired, and their mobility may be limited. Some live in cities or semi-urban areas, while others live in rural areas. However, given the disparity in user categories and their needs, coupled with COVID-19 pandemic restrictions, libraries should rethink and renovate their services as a matter of necessity to satisfy the needs of general users and special or disabled users (Adesina, Oyedokun, Otonekwu, & Ambali, 2022).

Users' access to library resources and services was severely constrained after the libraries' closure. Librarians swiftly broadened their knowledge and added new services to assist users online better. One fact is that vulnerable groups continue to bear the brunt of the pandemic more than affluent groups. The plight of this vulnerable group has intensified as a result of this regrettable occurrence (Adelaja, 2021). The general assumption or belief is that the effects of the outbreak hit the most vulnerable people foremost, so something must be done, and the most vulnerable groups of users, on the other hand, should not be left behind.

As a result of the COVID-19 pandemic coupled with a sizeable number of people leaving with some form of disability, the world is facing a tremendous demographic shift. Meanwhile, individuals with disabilities needed access to information in order to be productive and contribute positively to national development, which is why advocacy for equal access to information has gained popularity. However, there appears to be a disparity in the availability of information services for different types of users. Given the diverse identities, information needs, mental conditions, and physical mobility of information users, it goes without saying that libraries should be better prepared to meet the needs of all categories of users (Yi, 2016). It is also worth mentioning that information requirements aren't set in stone; they can shift over time based on circumstances, including disasters and pandemics like the virulent coronavirus COVID-19.

The digital age, together with the digitization of information resources, has created a bewildering array of technologies that allow libraries all over the world to become more lively and accessible. Libraries are

evolving away from their former isolation and toward more integrated systems and networked services. Due to the ever-changing reality of information services orchestrated by information technology, library collections, facilities, and services are evolving. On the other hand, the issue of social exclusion of some groups of users has caused libraries to worry about how they may contribute to solving the problem and making all users socially inclusive in the provision of information services without discrimination (Otonekwu, Oludipe, Babafemi, Lami, & Oyedokun, 2019). Users with a computer and internet access may now access vast amounts of data and information. In terms of the benefits that digital library services provide during the pandemic, those on the disadvantaged side of the digital divide remain digitally excluded and underserved, with alarmingly high levels of information illiteracy. On the other hand, aside from a lack of information literacy skills, the majority of less-privileged and disabled users are low-income earners, and as a result, electronic access to information tools and devices remains a luxury.

The need to preserve endangered library resources, improves the efficiency of information search processes, and improves access to library resources are significant motivations for digitization initiatives. Online access to digitized information, of course, opens the door to a much larger user base. The digitization of library services has opened up new ways for users to participate in real time from multiple locations. Most disabled users who utilize information resources are stigmatized and at a disadvantage, particularly during the COVID-19 pandemic (Adesina, Oyedokun, Otonekwu & Ambali, 2022). Some are restricted to wheelchairs, while others have limited movement, necessitating the use of special technology to suit their information needs, such as audio recordings, Braille, book talks, and screen reader software that can be downloaded on computers and phones. Access to the facilities, collections, and activities is a requirement for library services for disabled individuals. The library should be accessible to users with a wide range of disabilities, which is more complicated than it appears. Libraries should ensure that the library's website is accessible and readable to a wide variety of impaired people. Libraries should make audiovisual works in sign language available where possible. The goal of library website accessibility is to generate perceivable, operable, and understood content by the widest possible variety of users, as well as content that is compatible with their vast range of assistive devices, both now and in the future (Guion, 2022).

## **5. Challenges Encountered in Delivering Library Services during the Pandemic**

The major challenges revolve around getting information to the doorsteps of users who are vulnerable and noticeably absent from the library. The pandemic had a far-reaching economic consequence on library finances, as all new digital and extended services are provided with a declining library budget (Wang & Lund, 2020). Libraries are experiencing unprecedented disruption as a result of COVID pandemic restrictions and reopening. Obviously, there is no quick fix for the pandemic as new waivers and variances surface and only a sizeable percentage of the world population has been vaccinated. Librarians are faced with the challenges of making an informed decision as to what and what services to maintain, what new services need to be developed, and what needs to be adopted and adapted to keep the library running and bridge the gap between users and curated information. Absent of sufficient information on effective ways of cleaning and sanitizing print library materials, also pose a great challenge.

The Covid-19 outbreak caused tension and anxiety among the general public and had an impact on libraries and their patrons. Uncertainty, stress, and unfavorable emotional reactions among the library community as well as job insecurity have resulted from workplace anxiety and stress, which also has arisen as a significant concern for libraries (Ashiq, Jabeen & Mahmood, 2022). Infodemic and changing information seeking behavior of library patrons represents another significant challenge for libraries. Aside from the confusion and panic that the sudden pandemic outbreak caused, there was also a lot of disinformation, taunting, and tension on social media. The sudden closure of libraries and the conversion of physical library services to online services also caused problems for both users and library staff, especially those who lacked digital skills (Ameen, 2021).

The absence of proactive, visionary and planning appeared as a hurdle for libraries, along with the absence of legislation and regulations, social media policies, confusion during decision-making and policy change, and pandemic and disaster management preparations (Chigwada, 2021). Another substantial impediment to library services during the pandemic is the digital divide and social exclusion that set less-urban and rural areas apart from urban areas. Most users in rural areas do not have access to the internet, broadband, or a Wi-Fi connection. Therefore, they have been excluded from the library's digital transformation. Due to the newness of the virus, most information concerning COVID-19 is currently available online. Therefore, electronic information resources were prioritized during the pandemic (Tammaro, 2020). Even though some publishers with digital information resources make their information resources, particularly those related to COVID-19, open access during the pandemic, copyright appears to be an issue, as obtaining permission from publishers to digitize their intellectual properties appears to be nearly impossible.

## 6. Conclusion

The deadly COVID-19 virus is still wreaking havoc around the globe. Unfortunately, we have observed the virus's unrestricted global spread, and the government-imposed lockdown and limitations appear to have interrupted and hindered library services. Digital library services allow for a larger number of users to be engaged at once, and a wider range of information is activated in libraries across the world. However, not all library users are online or have internet access. Therefore, libraries' space and facilities still need to be reopened to users. The COVID-19 pandemic has undoubtedly hampered access to the physical collection, but librarians still have an important role in informing and educating the community of users about new developments, advancements, and discoveries related to the pandemic. Librarians are vital frontline workers in disasters; therefore, finding a mechanism to keep information services running without interruption should be a priority. With the global pandemic of COVID-19, a new mission for digital literacy was established. It has become a necessity for librarians to be trained on developing technology tools for effective information transmission during and after the pandemic. As a result of technological advancement, traditional libraries have been transformed into smart libraries, as libraries now have a wide range of electronic information resources accompanying with digital library services.

## 7. Recommendations

The recommendations below were given based on a systematic review of literature in respect to library services during the COVID-19 pandemic:

1. Taking a cue from the pandemic, libraries should consider dynamic, innovative ways to increase information access, digital reference, and circulation services so that they can continue to provide information services in the event of a disaster or pandemic.
2. Libraries should adapt their configuration to accept hybrid services that allow people to communicate both physically and digitally with them.
3. To reconnect with remote and lockdown-affected consumers who want online information services, librarians should be technologically nimble.
4. To limit the number of users visiting the library, libraries should ensure that electronic information resources and digital services are always available and accessible.
5. Encouraging libraries to eventually evolve into a configuration that is adaptive to the demands and expectations of the post Covid-19 era, extensive use of social networks, adoption of an intuitive and responsive library website and blended librarianship are some of the practices proposed.
6. Libraries should provide users with materials and training in information literacy, particularly in health information literacy and data literacy.

## Compliance with Ethical Standards

*Conflict of Interest:* The authors declare that there is no conflict of interest.

*Ethics Committee Permission:* Ethics committee approval is not required for his study.

*Authors Contribution Rate Statement:* The authors declare that they have contributed equally to the article.

*Financial Support:* No

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