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Preprint · March 2020

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Announcement Information Provided by United States' Public Libraries During the 2020
COVID-19 Pandemic

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Abstract

The novel coronavirus, COVID-19, has developed into a global pandemic with far-reaching ramifications for society. An onslaught of misinformation and confusion about the virus has led to panic and ignorance that threatens further damage. The purpose of this article is to synthesize timely information about the COVID-19 virus in plain-language and examine how public libraries have responded to the pandemic in real-time through their online announcements to the public. The findings indicate some potential best practices for libraries in keeping the public informed about the evolution and spread of the virus.

The 2020 outbreak of the coronavirus, COVID-19, has developed into a global pandemic that has impacted virtually all aspects of daily life. Significant information problems have emerged as misinformation about the virus and policies enacted to curb its spread have emerged in news media, websites, and social media. Discussion of the role of libraries in providing reliable information during times of crisis and pandemic has existed for many decades (Ahmed, Bath, Sbaffi, & Demartini, 2019; Featherstone, Boldt, Torabi, & Konrad, 2012; Frias, 1995; Zach, 2011). The advent of the Internet, social media, and other means for libraries to communicate with the public, has only further the capacity of libraries to serve in this role. The purpose of this article is to support that role by examining the nature of the ongoing 2020 COVID-19 pandemic and how a sample of public libraries have and may further respond to this evolving crisis.

Review of Existing Literature

Background on COVID-19

COVID-19, a new coronavirus that has not been identified previously, is different from other coronaviruses that usually circulate among humans and cause mild illness (e.g., the common cold) (Centers for Disease Control and Prevention, 2020). The complete clinical picture of COVID-19 is not known. The reported illnesses range from mild (no reported symptoms) to severe, including death. A report from China shows that 16% of cases have developed severe illness (Guan et al., 2020). Older adults and all age groups with serious underlying health problems, such as heart disease, lung disease, and diabetes, appear to be at higher risk for severe conditions. The first case of affected COVID-19 was reported in Wuhan, China, in late December 2019 (Huang et al., 2020). As the date of 12 March 2020, over 110 countries and territories/areas report laboratory-confirmed COVID-19 with over 125,000 confirmed cases and 4606 deaths (World Health Organization, 2020). Therefore, on March 11, 2020, the World Health Organization classified COVID-19 outbreak as a pandemic, which refers to global disease outbreak (World Health Organization, 2020).

COVID-19 is usually transmitted from person-to-person through coughing and sneezing, and close contact with an infected individual or contact with infected surfaces or subjects (Centers for Disease Control and Prevention, 2020). It is suggested by the Centers for Disease Control and Prevention (CDC) to clean hands often and avoid close contact with other people. However, wearing masks for both healthy and sick people, which is required by Asian countries' governments (e.g., China, South Korea, and Japan) to slow the spread of COVID-19, is not suggested by the U.S. CDC. Yu, Du, Ojcius, Pan and Jiang (2020) and World Health Organization (WHO, 2020) report that the R_0 (a mathematical term for how contagious an infectious disease is) of COVID-19 is 3.77, which indicates every person affected with COVID-19 will infect 3.77 people. Therefore, blocking the transmission route is the most important means to control the spread of COVID-19 (Wilder-Smith & Freedman, 2020).

Mortality Risk

Yu, Du, Ojcius, Pan and Jiang (2020) indicate a fatality rate for COVID-19 of 3.4%. Jung et al. (2020) provided a slightly higher fatality rate for COVID-19, in the range of 5-8%. These rate estimates are lower than severe acute respiratory syndrome (SARS), but are considerably greater than both H1N1 and the seasonal flu (Jung et al., 2020; Longini, Halloran, Nizam, & Yang, 2004; Mills, Robins, & Lipsitch, 2004; Pebody et al., 2010; Valliant et al., 2009; WHO, 2020). Linton et al. (2020) estimate that the average length of time from illness onset to death is 13 days. Koboyashi et al. (2020) note that the most at-risk population for life-threatening outcomes is older adults with existing health conditions; however, the risk of death among younger adults is still greater than with the seasonal flu.

Geographic Spread of COVID-19

COVID-19 can affect any population, regardless of ethnicity, age, gender, or any other demographic factor, or geographic location. However, there has been a few studies that indicate areas of the most significant spread of the virus. Sajadi et al. (2020) indicate a geographic band where average winter seasonal temperatures are between 5 and 11 degrees Celsius with low humidity tend to be where most significant local spread occurs. The countries and cities that have experienced the largest impact of COVID-19 (South Korea, central China, Iran, Italy, and the southern and western United States including Atlanta, Dallas, Denver, San Francisco, and Seattle) all fall within this climate band. In the United States, states north of Tennessee, Oklahoma, Nevada, as well as the southern states of Florida, New Mexico, and Arizona, fall outside this band. This may partially explain why nations like those in Africa have experienced lower spread of the disease (climate rather than ethnicity). However, this by no means indicates that the virus cannot spread in certain regions. Indeed, spread has already been observed, particularly in high population states like New York and Ohio – and it is worth noting that temperatures obviously fluctuate as the year progresses. Everyone should always observe the guidance provided by organizations like the CDC to ensure the spread of disease is mitigated.

Government Responses to COVID-19

The U.S. government has launched several initiatives to response to COVID-19 as of March 12, 2020, such as health and safety, travel and transportation, business, and education (USA gov, 2020). In stark contrast to the response of governments in other countries, such as Asia, the CDC does not call on individuals to wear facial masks. Peng et al. (2020) report that infected patients continue to spread the virus into the environment in the form of droplets and aerosols. Healthy individuals inhale the infection through the respiratory tract. Therefore, airway protection plays a crucial role in the prevention and control of COVID-19. Wearing an oral-nasal mask (e.g., surgical masks and N95 masks) is one of the main protective measures (Glatt, 2020; Li et al., 2020). CDC of the U.S. (2020) suggests that individuals who are sick (have symptoms of affecting COVID-19) wear a facemask when they are around with other people. However, a person carrying COVID-19 may not have any symptoms, including both patients in the incubation period and asymptomatic patients (Hoehl et al., 2020).

Quarantine is another approach to slow the spread of COVID-19. The quarantine includes self-quarantine and community quarantine. CDC of the U.S. requires individuals stay at home (self-quarantine) for 14 days and practice social distancing after leaving a widely distributed or ongoing communities with COVID-19, all of which listed in the CDC websites are foreign

countries, such as China, Iran, South Korea (Centers for Disease Control and Prevention, 2020). However, there are no requirements for compliance with the requirements after traveling in regions of the United States that are widely distributed with COVID-19, such as the state of Washington and New York. CDC (2020) suggests individuals self-quarantine for 14 days after close contact with COVID-19 patients during the trip in the United States. The potential for the virus to spread in the incubation period (Yale Medicine, 2020) and asymptomatic patients may lead to the virus spreading in the community after the traveler contact virus carriers at the destination or in closed-in settings with little air circulation during traveling (e.g., conferences, shopping malls, and transportations) (Centers for Disease Control and Prevention, 2020). Therefore, no matter domestic or foreign travel, if there has been an experience in closed-in settings with little air circulation environment, individuals should self-quarantine after traveling or wear facial masks during travels to reduce the probabilities of infected with the virus.

Public Libraries and Support During Crises

Featherstone, Lyon, and Ruffin (2008) interviewed library professionals who had direct experience with disaster response (e.g., post-Hurricane Katrina and post-SARS pandemic). Through these interviews, the researchers identified emergent roles that these library professionals served: institutional supporters, which serve as a “command center for activities,” to support members of the community; collection managers, who ensure the maintenance of the collection throughout the disaster; information disseminators, who disseminate reliable information about ongoing events; internal planners, who provide support to staff; community supporters, who offer emotional support and distribute donations; government partners, who develop/distribute reports on an evolving situation; educators and trainers, who curate information and provide instruction for emergency responders; and information community builders, who helped restore the normal functioning of the library after the disaster. These roles are all important for restoring the normal functioning of the library after the disaster event.

As noted by Malizia, Hamilton, Littrell, Vargas, and Olney (2012), libraries may serve important collaborative roles with community emergency responders. The authors point to the National Network of Libraries of Medicine as a source of information and leadership around which to rally. As such, they use examples of the network’s guidance following Hurricane Katrina to offer support to fellow library professionals: take advantage of library staff’s skills in providing reliable information to the public (this is particularly viable with the growth of chat reference), libraries have the infrastructure (including online) to educate the public; libraries can provide a sense of normalcy and community after the emergency event has concluded.

Featherstone, Boldt, Torabi, and Konrad (2012) discuss the process of disseminating pandemic information by health librarians during the 2009 H1N1 pandemic. The researchers found that planning for a disaster response was immensely beneficial in enacting a swift response. The information needs of physicians and nurses grow substantially during this time, and a measured approach allows health librarians to play a vital role in satisfying those needs. Ultimately, the librarian’s ability to gather, evaluate, and curate reliable information about the pandemic was one of the most crucial roles during the H1N1 outbreak. The libraries in the H1N1 study indicated that a suitable number of news items to share with library users may be in the

range of 5-10, with there being a real concern of information overload for these already-stressed individuals. Curating the most relevant and informational sources is key.

Zach (2011) examined public libraries’ responses during the 2009 H1N1 pandemic. To contextualize his study, Zach includes a comment from a former director of media relations for the CDC, Gobin (2003, p. 126), “people feel comforted by the truth even when it is not what they want to hear.” In his case study, Zach notes that many libraries failed to provide links to information from reliable sources like the CDC (only 15 of the 50 largest public libraries provided links). He criticized libraries for providing information only about the library during the crisis, rather than information about the crisis itself, and encouraged further collaboration to provide relevant and timely information to patrons.

Methods

A content analysis of library announcements related to the COVID-19 pandemic was performed by two researchers during a two-day period (March 14 and 15, 2020) during the ongoing events. 50 public libraries of varying size and service population demographics were purposefully selected for study. A list of these 50 libraries is shown in Table 1. These libraries’ announcements about the 2020 COVID-19 virus pandemic were collected. These announcements were analyzed based on the date the announcement was first posted as well as eight types of important information they may provide: whether the announcement states that the library is closed, whether it states the library’s programs are suspended, whether it provides information about the virus (rather than just what the library is doing to combat spread), whether it provides hygiene guidance, whether it provides links to health resources (like the CDC’s website), whether it provides guidance on finding reliable information about the pandemic, whether it provides information about the library’s remote resources (like e-books), and whether the announcement includes a statement “signed” by the library’s director.

Table 1. 50 Public Libraries Whose COVID-19 Announcements were Analyzed

Akron	Fort Bend (TX)	Oakland
Albany	Hawaii System	Orange County (FL)
Boston	Huron (OH)	Osh Kosh
Brooklyn	Indianapolis	Phoenix
Buffalo	Kalamazoo	RAILS (IL)
Canton (MA)	King County (WA)	Roanoke
Cape Girardeau (MO)	Lake County (FL)	San Antonio
Charlotte	Las Vegas	San Diego
Chattanooga	Lawrence	San Francisco
Chicago	Lexington	San Jose
Cincinnati	Los Angeles	Seattle
Dallas	Maplewood (NJ)	Spokane
Dekalb County (GA)	McCracken County (KY)	Suffolk (VA)
Denver	Memphis	Tacoma
Des Moines	Mobile	Washington DC
Elmhurst (IL)	Nampa (ID)	Wyoming State
Erie County (PA)	New York City	

Findings

The findings for different types of information provided in library announcements about COVID-19 is shown in Table 2. As shown in the first row, the percentage of announcements posted on March 13 or before was 78%. The exact breakdown was 22% on or before March 12th, 46% on March 13th, 18% on March 14th, 2% on March 15th, and 12% unknown.

Table 2. Findings from Library Announcements About COVID-19

Category	Percentage
Date of Announcement (% Before March 14, 2020)	68%
Announced that library is closed	52%
Announced that library programs are suspended	86%
Provided information about virus	56%
Provided hygiene guidance	58%
Provided links to health resources	80%
Provided guidance on finding reliable information	64%
Provided information about remote library resources	82%
Statement from library director	26%

Only slightly over half of the libraries studied announced that they were temporarily closing in response to the virus, however, a very large percentage indicated that all programs were suspended. Many of the libraries encouraged patrons to utilize electronic resources when possible and over half of the libraries stated that all late fees were waived until a certain date. Most libraries also provided links to reliable health resources. The most common of these resources was the CDC's website.

Few more than half of the libraries examined provided information about the COVID-19 virus or information about hygiene practices. The clearest examples of this information being provided was in the infographics/visualizations that illustrate proper handwashing technique or the practice of social distancing. Only one in four libraries examined provided a statement directly from the library's director. Such a statement may be both more definitive and comforting to library users and employees seeking clarity and guidance in the situation. Nearly two-thirds of libraries provided guidance on finding reliable information about COVID-19, which is a major role that could be served by libraries at this time, as discussed by Featherston, Lyon, and Ruffin (2008) and Zach (2011). While the reaction to the pandemic is varied among libraries, many are taking significant precautions to improve the nation's outlook for the outbreak.

Discussion

In the time since the data for this study was collected, many of the libraries that had not announced their closure did so; however, there continues to be a significant proportion of libraries that remain open to the public, often with adjusted operating hours. Many of these

libraries are open daily throughout the year and have served as places of community following hurricanes and other tragedies. With the spread of the coronavirus COVID-19, relatively unprecedented measures have been taken by many libraries.

Compared to the findings of Featherstone, Boldt, Torabi, and Konrad (2012) and Zach (2011), response to COVID-19 appears to be improved in comparison to the 2009 H1N1 pandemic. Zach reported that only 15 of the 50 largest public libraries incorporated information about the virus in their announcement. While this study is not a direct replication of Zach's, it does employ similar methods in examining library announcements from 50 public libraries of varying size. 56% of these announcements included information about the virus and 80% provided links to resources like the CDC. This shows that many libraries were not merely concerned with providing information about the library itself, but also embracing their role as disseminators of quality information about the pandemic to their patrons.

The roles of librarians following Hurricane Katrina, as discussed in Featherstone, Lyon, and Ruffin (2008) may be applicable to the ongoing situation of COVID-19. As noted in that study, libraries and librarians in the wake of Katrina served roles ranging from command centers for community-wide efforts to information disseminators that provide the most current and trustworthy information to the public. These are roles that may be important as physical library spaces remain closed to the public, but library staff may continue to offer remote support. Through library websites and social media pages, recent and reliable information may be shared that combat rampant misinformation. Libraries may be seen as a source for community updates, they may even provide remote services like story times for children, via YouTube and other social media. There is ample room for the strengths libraries have worked to develop over the past many decades to be on full display during a time of pandemic.

One library that has a particularly detailed and well-organized announcement is the Huron, Ohio library (<https://www.huronlibrary.org/about-hpl/message-about-covid-19>). This library, which is located within one of the epicenters for the virus in the state of Ohio, covers all the types of information examined in this study in its announcement in a clear and succinct manner. Huron's library announced the closure of its library for a minimum of three weeks and suspended all library-related activities during that period. Particularly admirable in the announcement is the clearly-titled section "Trusted Information Sources," which provides links to the websites of the Ohio Department of Health and Centers for Disease Control. At the end of the announcement is the signature of the library's director.

Conclusion

Libraries may play an important role in providing reliable information about pandemics like COVID-19, using their strengths in gathering, evaluating, and curating information for the public. As observed by Zach in 2011, many libraries share information only about the library itself, however there is opportunity for information to be provided that will benefit patrons and likely reduce their anxiety about these pandemics. Librarians should not overlook their unique skills and the important role they may play in curbing the spread/impact of diseases like COVID-19 by combatting fake news/misinformation and providing reliable information to patrons.

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