How public libraries respond to the COVID-19 pandemic?: Arab Academics' Perspective Prepared by:

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Abstract

The purpose of this paper is to investigate Arab academics' perspectives about the potential role of public libraries in supporting their communities during the COVID-19 pandemic. The study adopted mixed-methods approach. Initially, observed initiatives taken by international public libraries during the current crisis, then designed an online survey which was undertaken from March to April 2020. The survey was designed to collect Arab academic visions. The findings showed that eresources availability in the current crisis is a must, also health awareness is a national duty. The study also indicated that public libraries can develop their own initiatives to do more than providing information to support their communities in crises, similar to those permitted their 3D printers for community services to produce face shields for health workers. The study also highlighted the library's entertainment role, targeting all ages to relieve their stress to avoid its negative impact on immunity. It also illustrated the measures for the post-pandemic era and the impact of the current crisis on libraries' future. The study highly recommends that every library must have its own emergency plan to improve their response in future crises. The value of the current study lies in being first Arabic study provides deep insight on how public libraries can manage the current crisis, and crystallizes a framework that libraries can depend on it in future health crises.

Keywords

Libraries' social responsibility; Libraries VS COVID-19; Public Libraries; Global health crises; Health awareness.

Introduction

On December 31, 2019, the Health Commission of China reported that a pneumonia cases with an unknown cause were linked to a seafood market in Wuhan. It was a new virus of the coronavirus family that infects humans, differs from both MERS-CoV, SARS-CoV (Zhu N et al., 2020). The disease has been named 2019 Coronavirus (COVID-19) by the World Health Organization (Kannan et al., 2020). On March 2020, WHO characterized COVID-19 as a pandemic and announced that this crisis will touch every sector, so all countries have to come up with a comprehensive strategy to minimize infections (WHO, 2020).

This unprecedented crisis differs from other health crises, as it led to massive restrictions in all countries, which forced many countries to restrict all direct services. Authorities have adopted quick and effective measures, including bans on public gatherings, school closings, travel restrictions, and other precautions to create social distancing (Hale et al., 2020). This also affected library activities, forcing them to shut down and turn to providing services remotely, depending on available technical means such as social media, websites, and virtual tools. It is a unique challenge for libraries to highlight their social responsibility during a crisis period in order to demonstrate how they can sustain their communities as part of their message and core professional practice. This motivated many libraries and information institutions to reveal their innovations to provide services properly and in a secure way. As a precautionary move,

Windsor Public Library implemented physical distance measures while serving patrons by placing a cart in front of the circulation desk, but there was a resistance from patrons against this procedure, as they visit libraries expecting close interaction with human beings (Ford, 2020). Another effort by Idaho Falls Public Library applied social-distancing by moving furniture six feet away between patrons and staff. It also implemented some measures, including sanitizing surfaces every 90 minutes and quarantining returned materials for five days.

Literature review

COVID-19 pandemic crisis

Searching both the Arabic and the English literature revealed that there are some studies covered the role of libraries in facing many health crises, but there is a scarcity in studies related to COVID-19 crisis. An earlier study by Ting Wang and Brady D. Lund (2020) used a content analysis approach to investigate announcements provided by United States' Public Libraries during COVID-19 virus pandemic, it showed that libraries may play an important role in curbing the spread of the virus by providing reliable information about health pandemics using their strengths in gathering and curating information to patrons, reducing patrons' anxiety about these pandemics, and combatting fake news and misinformation about the disease.

Lara Ewen (2020) spotted out COVID-19 Pandemic Preparedness, and mentioned that libraries are considered information gatekeepers, so it's a way to remind the public about what libraries have always done best by sharing accurate information and assuaging patrons' fears.

An article by Sarah Ostman (2020) discussed steps library workers can take to help homeless members of the community find the resources they need. She emphasized the importance of posting a list of the open shelter sites during the pandemic,

warming centers, and local food banks. This is after making sure that they're operating normally during the pandemic.

Anne Ford (2020) discussed library services during the COVID-19 pandemic and presented some attempts by public libraries to introduce their services to patrons during this crisis. As an example, the Tom Green County Library System in San Angelo, Texas allowed holding an item, then contacting the library to pick an appointment time for its delivery, notifying the patron's car model and color, then the librarian delivers it wearing gloves and holding the item in a plastic bag.

Lara Ewen (2020) discussed sanitizing library materials and surfaces during the COVID-19 Pandemic, and described this pandemic as an unprecedented and unique situation as this disease forces libraries to step back at exactly the time they want to step up. Concerning disinfecting, Ewen pointed to the importance of prophylaxis, or preventive measures, and the closure of libraries until the risk of public infection is eliminated. The study found that planning to disinfect and clean library collections from epidemics may cause collection damage, and libraries have to accept this.

The Public Library Association (PLA, 2020) reported US public library responses to the COVID-19 pandemic through a survey covering 28% of American libraries. The findings showed that 98% of public libraries building were closed, but staff continue to serve their community as 70% of respondents referred that their policy allows staff to work remotely, (76%) extended online renewal policies, (74%) widened their online service by using E-books and streaming media, and (61%) added virtual programming. They also pointed to new activities such as deploying 3D printers, reaching by phone those digitally disconnected, adapting in-person online delivery programs, and expanding the virtual library card.

Other global health crises

Libraries have faced many previous health crises, so there are many studies covering the role of libraries during their occurrence. Harris, Wathen, and Chan (2005) examined the preparedness of public library staff in Toronto, Ontario to respond to health inquiries during the 2003 outbreak of SARS. The study also highlighted the importance of the public library's reference service in the time of health crises.

In an attempt to classify library potential roles in disaster response, Featherstone, Lyon and Ruffin (2008) recorded the stories of twenty-three North American librarians who had direct experience with previous disasters like epidemics, fires, tornados, terrorism, and earthquakes. The study classified the library roles to eight categories: institutional supporters; collection disseminators; community supporters; collection managers; information community builders; government partners; educators and trainers; and internal planners.

An Arab study by Elsaid and Saleh (2009) studied the role of public libraries in developing health awareness in the influenza pandemic crisis. The study used a comparative approach to explore the programs and activities of public libraries in Egypt, America, and Canada. The study listed health awareness activities in public libraries: providing a collection of information resources; holding seminars and lectures; distribution of pamphlets; adding health information links on library websites; and participating in national campaigns organized by the institutions in the country.

In (2011) Zach studied the role of public libraries in providing essential information during the H1N1 pandemic. The researcher emphasized the necessity for libraries to use alert systems and social media tools to provide real-time alerts and links to emergency preparedness.

Similar study by Featherstone, Boldt, Torabi, and Konrad (2012) focused on the provision of pandemic disease information by

thirty health librarians during the H1N1 pandemic. The study found that prior planning reflects on rapid and effective response. The investigators reported using some communication tools to provide rabid and updated information about H1N1, such as social media, email lists, Twitter, blogs, RSS feeds, and wikis. The researchers listed the best practices for health care librarians in a pandemic, like dissemination of disease information to support decision making and providing related studies and news about the pandemic from governmental health agencies.

Malizia, Hamilton, Littrell, Vargas, and Olney (2012) covered emergency response roles of public libraries, with a focus on the project of the National Network of Libraries of Medicine (NN/LM) and how it assessed public libraries' needs. The researchers listed the public library qualities that make them highly valuable to disaster response, such as using library staff's skills in serving all who pass through their doors, providing information for evacuees and community residents in emergency times; and offering some space to accommodate the needs of disaster victims.

The librarian's disaster planning and community resiliency guidebook issued by the New Jersey State Library (2013) has pointed out another role for libraries in helping patrons deal with unusual and stressful situations, so librarians have to make an effort to inform community people of what they can expect from the library in crisis.

Study purpose and research questions

The purpose of this study is to reveal how public libraries should respond to the COVID-19 pandemic through illustrating which procedures and services should be taken during this crisis to support their communities in innovative ways. The following research questions were investigated:

RQ1. Did libraries play a vital role in the COVID-19 pandemic crisis?

RQ2. What are the procedures that libraries have to carry out during this crisis?

RQ3. What services and activities can libraries provide to their patrons during the closing of their doors?

RQ4. What is the role of libraries towards their communities in the fight against this pandemic?

RQ5. What about the procedures that libraries should take after the crisis ends?

RQ6. What is the impact of this global health crisis on the future of libraries?

The research methodology

The preliminary goal for this study is to forge a guideline for public libraries through academic vision. The study adopted mixed-methods approach. Initially, monitored the innovative initiatives taken by international public libraries during the current crisis by visiting the sites of Arab and international libraries and compiling the actual reality implemented by libraries. Then an online survey was designed to target academics in library and information science departments in Arab universities to forge their vision and put it in front of all libraries to enhance benefit.

The study relied on Arab academics to forge its vision, as it's expected they have great experience in dealing with such crises due to their academic research, reading, and participation in international conferences discussing social problems, which allow them to have a broad view of national and international practices.

A copy of the questionnaire is available in Appendix 1. *Questionnaire design and data collection*

This paper started to collect data from March to April 2020, using the Survey Monkey cloud. The participants could be categorized into: Emeritus Professor, Distinguished Professor, Professor, Associate Professor, Lecturer, Associate lecturer, Demonstrator, Instructor, and other categories. The questionnaire survey was designed to gather basic demographic and academic information, such as degree, country, and university; the second part contained the views and suggestions of participants on study questions. The technique to reach them varied from official/private e-mails to social media accounts (Facebook, What's App) for those who couldn't be reached via e-mails. The population of the study is outlined in Table I.

Table I. Participants distributed by degree

Degree	No.	(%)
Emeritus Professor	1	3.45
Professor	6	20.69
Associate Professor	9	31.03
Lecturer	9	31.03
Associate Lecturer	3	10.34
Demonstrator	1	3.45
Total	29	93.5%
Missing	2	6.5%

A total of 90 academics were contacted, of which 31 (34.4 per cent) answered the questionnaire, 29 surveys were completely answered and 2 responses were skipped to mention their degree. The survey was answered by academics in eleven Arab universities, from four countries in Egypt, Saudi Arabia, Iraq, and Jordan. The distribution is illustrated by university and country in Table II.

How public libraries respond to the COVID-19 Table II. Participants distributed by University & Country

Countries	Universities
Egypt	Cairo Univ., Menofia Univ., Helwan
	Univ., New Valley Univ., Beni-
	Suef Univ.
Saudi Arabia	Taiba Univ., Prince Sultan Univ., Imam Univ., NB Univ.,
Iraq	Al-mustansiriyah Univ.
Jordan	Jordan Univ.

Results of the study

The survey focused on academic visions and suggestions about how public libraries manage the current crisis of the COVID-19 pandemic, aiming to deliver a guideline for current and future health crises. The findings are reported below, arranged by the research questions of the study.

The role of libraries during the COVID-19 pandemic crisis

libraries have a vital role in crises time, as it helps facing scarcity of information and fighting misinformation, try to sustain the decision makers in appropriate time, while keeping their employees safe (Freudenberger, 2020).

As a community hub (Renaisi, 2017), public libraries have to introduce services to their patrons wherever they are under any circumstances, especially in such critical times. The study investigated the Arab academic public libraries' role during the COVID-19 pandemic crisis (Figure 1). The result revealed that 32.26% of participants strongly agreed that libraries are playing a significant role in managing the COVID-19 crisis, and 38.71% agreed, while 25.81% were neutral. Only one participant (3.23%) expressed a dissenting opinion.

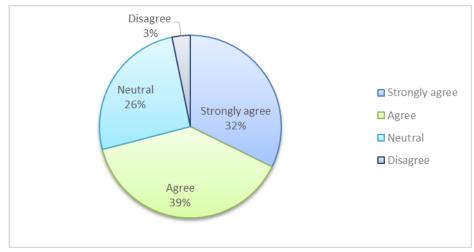


Figure 1. Participant opinions scale

The procedures libraries have to carry out during the COVID-19 crisis

To differentiate their vision of the procedures libraries should take towards their patrons during the COVID-19 crisis, the participants were asked to list the procedures that should be taken. The procedures included alerting its patrons that the library door would be closed; extending all due dates without additional fines; postponing all onsite events until further notice; providing exterior drop boxes for materials if possible; and requesting free access to resources related to COVID-19 from database providers. Finally, participants were asked to give their suggestions if possible. The majority agreed on the necessity of applying all the above procedures by all libraries with 58.06%, followed by raising the importance of providing free access to COVID-19 resources with 32.26% and 19.35% selected to give an urgent notice to patrons about the closure (Figure 2).

The participants recommended that libraries have to do more to spread health awareness through social networks. They also

encouraged libraries to ask for support from database providers and multinational technical companies like Google, Microsoft, and Adobe (Bayliss and Kletter, 2020).

The study also monitored other procedures from Central Rappahannock Regional Library in Virginia, which expanded virtual library cards, allowing new users to subscribe online to benefit from all library online services.

The study recommends that libraries should vary their communications tools during crises to serve more users and to support those in need to provide them with quick information. It should include chat, text, email, and phone calls for those digitally disconnected or those working in severe environments like healthcare workers searching for urgent information.

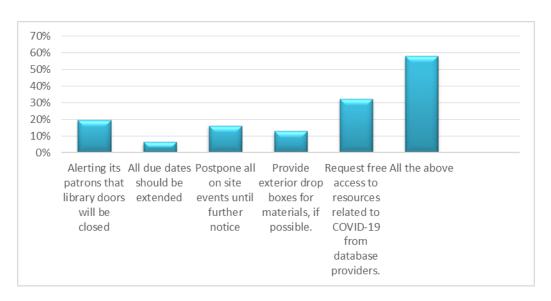


Figure 2. Procedures that libraries have to carry out during the COVID-19 crisis

Library services and activities during the COVID-19 crisis

The rapid spread of the virus forced libraries to close their doors to secure social distance. The study asked the participants to provide their visions of the services and activities that should be provided during the closure time. The study discovered that public libraries can provide searching on digital libraries, current awareness of the latest papers and news about the virus and its symptoms, online renewing of materials, interlibrary loan, digital reference service, online courses and workshops, and summarizing and podcasting books based on a previous examination of public library websites and social platforms.

According to the results shown in Table III, the majority of academics (61.29%) believe that libraries should provide all of the above services if possible, particularly searching on digital libraries (32.26%), current awareness (25.781%), digital reference services (22.58%), and providing online courses and workshops (22.58%). However, only one participant (3.23%) voted for book summarizing and podcasting, despite the researcher emphasizing the importance of such services in providing quick and accurate information to meet patrons' current needs.

There was also a suggestion from one participant to provide services day after day with limited seats and regularly sterilize the library, but in the current situation, the library can't implement this as closing doors is an authoritarian decision. Also, opening doors will have a negative impact on public health more than it could help, as stated by The American Library Association Executive Board (2020), who strongly recommended all libraries not to serve as vectors for a fast-moving pandemic.

Table III. Public libraries services during the COVID-19 crisis

Libraries services and activities during	No.	(%)
closure		
Searching on online materials and	1.	77.77
Databases		
Digital reference services	٧	17.01
Current awareness of the latest papers and	٨	10.11
news about the virus		
Online renewing of materials	٤	17.9.
Interlibrary loan	۲	7.50
Summarizing & Podcasting books	١ ١	٣.٢٣
Online Courses and workshops	٧	17.01
All the above	19	71.79

The role of public libraries in fighting pandemics in their communities

It can transform people's lives while serving communities during very dark times as part of its social responsibility during crises (Zeman, 2015). The participants were asked about libraries' duties towards their communities in the fight against the COVID-19 pandemic. The study specified these duties: participation in spreading health awareness for community participation in national health campaigns; providing the latest medical papers; and analyzing scientific research trends and results.

The survey showed that 64.52% agreed that all duties above should be considerable from the public library side, especially spreading health awareness, as previewed in Table IV. One participant added an opinion about the importance of entertainment services for different ages to relieve them from stress as it has a negative impact on immunity. There was an initiative by McArthur Library (2020) for arranging online events and entertainment programs. Their program depended on Facebook and Instagram Live services and included online story time and bedtime stories with celebrity readers. They diversified their program according to age; book read aloud for middle grade; read aloud for teens; online community read discussion; they didn't forget the smoothie recipes and demos; and virtual social knitting group via phone.

The study monitored another innovative initiative from public libraries to serve their communities (PLA, 2020). El Dorado County Library in California shifted their 3D printers to produce 700 face shields and coordinated with volunteers to distribute them to their local regional hospitals. Rochester Public Library in Minnesota coordinated with local authorities to open a day shelter for the homeless as all programs were cancelled, and allowed their librarians to be called up to serve the community.

Table IV. Libraries duties towards communities during the COVID-19 crisis

Libraries duties towards their communities	No.	(%)
Participate in spreading health	7	22.58
awareness		
Participate in national health campaigns	5	16.13
Providing the latest medical papers	6	19.35
Analyzing scientific research trends and	6	19.35
results		
All the above	20	64.52

How public libraries respond to the COVID-19 Procedures that libraries should take in the post-pandemic era

To create a plenary guideline, the study must include a scientific vision about the procedures libraries should do post-pandemic. The academics were given a vision to figure out their own perspective. The vision started with library sterilization, arranging festival events for patrons, requesting all late materials, activating all postponed events, and continuous spreading of health awareness. Table V. showed that 54.84% agreed to apply all procedures stated above, 41.94% focused on continuing spreading health awareness, 29.03% of participants showed a positive perception of the usefulness of library sterilization, 22.58% chose to reactivate all postponed events, at last arranging festival events (16.13%), then requesting all late materials without any fines (6.45%). Also, there was a suggestion to redesign library strategy to include the management of future health crises.

Table V. procedures libraries should take after the crisis ends

procedures libraries should take after the	No.	(%)
crisis ends		
library Sterilization	9	29.03
Arrange festival event with patrons	5	16.13
Request all late materials	2	6.45
Reactivate all postponed events	7	22.58
Continue spreading health awareness	13	41.94
All the above	17	54.84

The impact of the COVID-19 pandemic on libraries' future

As the COVID-19 pandemic impacted all sectors of life, and was expected to have a great impact on libraries' future, it shined a light on the gaps in our social safety networks and spotted the essential role of libraries in filling those gaps (Schwartz, 2020). The study tried to reveal these reflects from an academic point of

view. (Table VI.) which indicated that libraries have to focus on librarians' training on remote working skills and work under pressure (22.58%), add crisis management scenarios to their practices (22.58%), and libraries should show more interest in the acquisition of E-materials (19.35%). However, (6.45%) assumed that libraries may develop new services in the future. In addition to previous reflects, the participants refer to other impacts as designing an annual program for health awareness, improving the technical infrastructure, including website pages and social media platforms.

Table VI. The impact of COVID-19 on libraries future

The impact of COVID-19 crisis on the future	No.	(%)
of libraries		
More interest in the acquisition of E-materials	6	19.35
Focusing on training librarians on remote	7	22.58
working skills and work under pressure		
Adding the procedures of health crises	7	22.58
management to the library policy		
Perhaps new innovative services that did not	2	6.45
exist before		
All the above	20	64.52

Conclusion

The study relied on Arab academic perspective to present a framework for public libraries' sequencing actions that should be taken in the current crisis of the COVID-19 pandemic. The study also searched for innovative solutions to spread experience that provide librarians with adequate tools to face such circumstances and support their communities in a professional way without suffering from a shortage of knowledge, aiming to be well prepared for future crises with a strategic guideline.

The findings showed that E-Resources availability is a must. Also, public health awareness in this crisis is a national duty, so public libraries have to participate in public campaigns and seek to make their own initiatives demonstrating the reality of the current situation. They should coordinate with database providers and technical companies, allow online renewing of materials, and hold online courses to refine patrons' knowledge. The result of the survey indicated that public libraries should also develop new entertainment ways targeting all ages to relieve their stress to avoid its negative impact on immunity.

The study listed the procedures that should be followed during the COVID-19 health crisis to improve their emergency response, starting from alerting their patrons about library closure; extending all due dates without fines; postponing all onsite events, requesting free access to resources related to COVID-19 from database providers; and providing exterior drop books for materials.

The study highlighted the innovative initiatives and activities taken by public libraries, similar to those that permitted their 3D printers for community services to produce face shields for health workers, and other libraries added virtual ID card options to allow new patrons using their online services. The study also showed the entertainment efforts public libraries have made through social media platforms, encouraging national libraries to follow their steps.

To provide a plenary vision, the study offered the following procedures should be implemented in the post-pandemic era: starting with library sterilization; requesting all late materials; reactivating all postponed events; requesting all late materials; and keeping spreading health awareness. The study highly recommends that every library have their own emergency plan to improve their response in future crises.

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The results illustrated that this crisis will have a great impact on the future of libraries. Part of it will be e-materials' major rank in acquisitions process and involving strong protocols for flexible remote work infrastructure.

For future preparedness, the study suggests the following points be in decision-maker minds:

- Tailoring programs to suit communities' needs
- implementing sterilization on a daily basis in the library
- Expand self-service in libraries.
- Start using drones for delivering hard copies.
- Turn to activate virtual life networks for better visualization of services.
- Depend on robots to provide services to patrons in libraries.

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How public libraries respond to the COVID-19
Appendix
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Appendix I. Questionnaire
How public libraries respond to COVID-19 pandemic?
1. Degree
2. University (Name / Country)
2. On versity (rume / Country)
3. Libraries are facing a global health crisis due to COVID-19
pandemic, what are the procedures that Public libraries have to carry
out during this crisis?
Alerting its patrons that library doors will be closed.
All due dates should be extended.
Hold all requested materials.
Postpone all on site events until further notice.
Provide exterior drop boxes for materials, if possible.
supporting patrons with up to date health resources.
Others.
4. What services and activities can libraries provide to its patrons
during closing their doors?
Searching on online materials and Databases.
Digital reference services.
Current awareness of the latest papers and news about the virus and ways to
prevent it.
Online renewing of materials.
Interlibrary loan.
Online Courses and workshops.
Others.
5. What is the role of libraries towards their communities in the fight
against this pandemic?
Participation in improving health awareness of community members.
Collaboration in national health campaigns.
Providing the latest medical papers.
Analyzing scientific research trends and results.
Others.
6. What are the best initiatives that libraries implemented during this
crisis?

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(Please include the name of the library, the title of the initiative, and a
summary of it)
7. To what extent do you agree or disagree that libraries have played a
vital role in this global health crisis?
Strongly Agree
Agree
Neutral
Disagree
Strongly disagree
8. What about the procedures that libraries should take after the crisis
ends?
Complete sterilization of the library.
Organizing a festive event with its patrons.
Requesting all late materials.
Activate all postponed events.
Continue to increase health awareness for its patrons.
Others.
9. What is the impact of this global health crisis on the future of
libraries?
More interest in the acquisition of E-materials.
Interest in training librarians on remote working skills, and work under
pressure in the time of crises.
Adding the procedures of health crises management to the library policy.
Perhaps new innovative services that did not exist before.
Others.
10. Do you have any supplement or comment, concerning to the role of
Public libraries in the health crises?