Public libraries' services during a pandemic: From passive responses to proactive initiatives

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Abstract: This paper explores a number of key roles that public libraries can play during a pandemic. The paper categorises the common approaches adopted by public libraries to deal with this kind of crisis into three main categories including: passive responses, active practice and proactive initiatives. The passive approach is the least beneficial option as its only benefit is a collaboration with other sectors of society to stop the spread of the disease. The active practice which is based on pre-planning and quick actions provides a number of helpful services for the community during the disaster such as providing online access to resources and turning a number of face-to-face services into virtual. The third approach which is based on innovation and creativity is the most appropriate attitude and provides valuable services for the community when they need them most. Finally, the paper presents a matrix to depict the reactions of public libraries to the pandemic considering three stages of crisis management. The paper concludes having a proactive initiative approach is the most effective policy that public libraries can adopt to enable them to face the challenge effectively and help people during the crisis. Using available and emergent technologies, fostering active engagement with the community, collaboration with crisis management authorities are among the important steps that these libraries take into consideration.

Keywords: Public libraries, pandemics, global health crises, coronavirus, COVID-19, crisis management, crisis competencies, disaster preparedness, disaster recovery, crisis informatics.

1. Introduction

Since the beginning of coronavirus or COVID-19 pandemic in the early March 2020, alongside of all sectors of society information agencies including galleries, libraries, archives and museums (GLAM) - have reacted to the crisis. In the early days of the epidemic in order to stop the spread of virus some libraries cancelled their public events including talks, guided tours, story time sessions and onsite learning programs. They also have increased their cleaning and sanitation regimes throughout public spaces, and have installed hand sanitizer units in the buildings. Nonetheless, at the time of writing this paper, in

the late March 2020, as the spread of the virus was out of control most public libraries alongside with other public places such as schools, restaurants, café shops, sport complexes and shopping centers stopped their face-to-face services and closed their doors. Regarding the evolving situation this is very difficult to predict what will happen in the next few weeks or even days and nobody knows how long this lock down will actually take. However, from a Library and Information Science (LIS) perspective the question is in addition of closing libraries, what else can libraries offer to deal with this global disaster more effectively? How can we use LIS theoretical frameworks and professional values to help society in this difficult time? This paper only focuses on public libraries in this context and therefore, to be more specific the questions are:

- What are the main roles that public libraries can play in time of a global crisis like coronavirus pandemic?
- How can public libraries respond to the pandemic more efficiently?
- To what extent do we need original ideas and initiations for the future?
- What kinds of resources people need most in the time of a pandemic?
- Are we as information professionals fully prepared for their new needs?

2. Different kinds of crises

Before discussing the roles of public libraries in the pandemic time we need define and review different kinds of crises first. A crisis is an unwanted and usually unpredictable event with low probability but with high impacts. Rogers, et al. (2013) in *A Dictionary of Human Geography* define crisis as:

"An emergency event that threatens to destabilize or does destabilize the status quo. Crises can take many forms - economic, financial, social, political, and environmental - but all share the effect of causing great anxiety due to how they challenge, or radically and negatively alter the usual way of life." (Rogers, et al. 2013)

A crisis or disaster usually causes severe disruption during a short or sometimes long period of time and also bring about various economic, social, environmental and human damages. In the crisis management literature there is a cluster of related terms which some differences such as crisis, disaster and emergency. For examples, Soehner, et al. (2017) cited Brody (1991) to clarify the difference between a crisis, a disaster, and an emergency:

"A crisis is a turning point in a developing state of affairs. A disaster is an unfortunate sudden and unexpected event of any origin. An emergency is an unforeseen occurrence requiring urgent action" (p. 197).

However, the term crisis is the most common one in this area. It might be a natural disaster such as hurricanes, earthquakes, typhoons, tsunamis, floods, mudslides, volcanic eruptions, bushfires and avalanches. Some crises are manmade such as wars, riots, road accidents and so on. It might be an economic

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crisis like an economic recession. The crisis might have a political or military nature such as two world wars in the 20th century. In terms of scale a crisis might be local, national, continental or global. For instance, Brexit was a national crisis for the UK and in a higher level a challenge for the whole European Union. However, some crises have several aspects in the global level. The coronavirus pandemic in March 2020 is a global emergency with severe health, economic and financial impacts. As a result, all sectors of society have been affected by it and at the moment the world is looking for a solution.

The most serious emergency that the world is dealing with at the time of wiring this paper (March 2020) is coronavirus or COVID-19. Obviously, this is not the first pandemic in human history and just during the past century, there have been four influenza pandemics which were the 1918 pandemic of Spanish Flu, the 1957-58 pandemic of the Asian flu, the 1967-68 pandemic of the Hong Kong Flu and the 2009 pandemic of the Swine flu. (Panovska-Griffiths et al., 2019). Nonetheless, the spread of coronavirus was very fast and its economic impact was unprecedented. The epidemic was first identified in China in December 2019. The World Health Organization (WHO) declared the outbreak as a public health emergency of international concern at the end of January 2020 and eventually recognized it as a global pandemic on 11 March 2020 (WHO, 2020). Therefore, this is a global health crisis with various economic, financial and social impacts. The new wave of unemployment has already started in many countries around the world and many people have lost their job in a different sectors from tourism, hospitality and traveling to education and entertainment industry.

3.   Libraries and crises: A glance at the literature

A quick review of the literature shows there are three main clusters of publications about crisis management and libraries: (1) Libraries facing challenges as an organization and from an organizational point of view, (2) Libraries help society in the time of a widespread crisis, (3) Investigating the crisis and its impacts based on information science perspective. Although these trends are relevant, each one has its own aims and approach. The first one is based on organizational crisis management discourse, the second one is based on the professional values of librarianship and the third one has been formed according the existing theories in information science discipline from information seeking theories to information overload to information avoidance.

3.1. When libraries facing challenges as an organization

This type of publications is about crisis management inside libraries. Most papers in this trend report the ways libraries faced disruptive and unexpected events that threaten to harm them or their stakeholders. There is a large number of papers discussing how libraries deal with various challenges they have faced and how they have recovered from them or if still struggling. For example, dealing with budget shortage at the time of economic recessions or need for preserving library resources from natural disasters like floods, hurricanes,

earthquakes, tsunami, military conflicts, civil wars and so on. Kostagiolas, et al, (2013) reported in the recession time libraries should encourage creativity and innovation, develop new services, synergies, and alliances, while using emergent technologies. They also need to look at various opportunities such as promotion the real significance and value of libraries, the intellectual capacity of their staff, and increase access to repositories via national and international collaborations. In another case, Ilo, et al. (2018) measured the disaster equipment in terms of disaster preparedness and response practices in a sample of academic libraries. Also, Ilo, et al, (2019) reported that university libraries in the studied region are more equipped to fight fire disaster than any other emergencies and fire drills are the main disaster training received by the library staff while there are other dangers threating libraries. They also found that insufficient disaster facilities as well as inadequate funding were the major challenges confronting disaster training. Similarly, Cox (2010) identified three significant challenges facing academic libraries in a period of recession which are: resourcing, technological change and proof of relevance. Although his study was based on Irish context, more or less this is the same story for almost all libraries nowadays.

Moreover, Wani and Ganaie (2017) reported about the damage suffered by the libraries of Kashmir during the floods happened in 2014. They discussed the response and recovery measures being taken during and after the floods. The results indicated although libraries in the region are susceptible to the natural disasters, they are not fully prepared for them. They highlighted the inefficiency of libraries in terms of crisis management as most of the libraries do not have a disaster response and recovery plan. Matthews, et al, (2007) reviewed LIS literature from a disaster management perspective in archives, libraries and museums and they call for more planning, training and practice on this issue.

3.2. When libraries help society in the time of crisis

The second category includes publications discussing the role of libraries helping the society in the time of catastrophic events. For instance, Sabolović-Krajina, (2019) reported about how Croatian public libraries faced complex conditions in the past decades and provided a review of their reactions to a number of historical turbulent changes. The result showed free access to information and having a proactive approach towards library users are among the most important issues. Moreover, public libraries need to continue expanding their services from lending books and face-to-face reference services to online context and using emergent technologies and also taking proactive roles in local community development.

There are a number of papers about the role of libraries in the pandemic times. For instance, Frías (1995) called for more activities by libraries to fight with the AIDS epidemic and asked for more educational programs that libraries can run to disseminate authentic information about this disease, increase public

awareness and help people affected by HIV in one hand and irrational AIDS phobia from the public in another hand.

Hagar (2009) investigated the 2001 foot and mouth disease outbreak in the UK farming industry from the information science perspective and identified the crisis revealed many information and communication complications. She also discovered there were several gaps in the information needed during the crisis. She also explored the influence of rumors and gossips as a means of transmission of information and misinformation among different stakeholders during and after the crisis.

3.3 Investigating the crisis based on information science perspective

The third cluster includes the papers based on investigation of human information interaction in the time of crisis. As Hagar (2012) states: "*Crises precipitate an increase in communication and present complex information environment*". (p.1) Therefore, in a rapidly changing and complex information environment there are various informational phenomena to examine. Form hasty information seeking to information avoidance; from information overload to information scarcity and from looking for credible and authentic information sources to filtering fake news, disinformation and misinformation. Therefore, there are still numerous little understood topics in this context to investigate.

Bunce, Partridge, and Davis (2012) used a grounded theory methodology to explore the information experiences of people using social media during the 2011 Queensland Floods in Australia. They have identifies four themes including monitoring information, community and communication, affirmation and awareness. Their results showed people browse social media to monitor the news about the flood. They also use social networks to stay in touch with their friends and families or to contact organizations. In the next stage they look for new information to confirm the accuracy of what they have already knew about the crisis. Finally, they hope to increase their awareness about the disaster via different sources. In another example and in a very different crisis, Shaheen, (2008) looked at the social networks and explored information seeking behaviour of students during a political crisis in Pakistan. In the abovementioned clusters of publications, the current paper locates in the second category and discussed the role of public libraries in the time of coronavirus outbreak.

4. Three stages of a crisis

Each crisis has three stages: before the crisis or pre-crisis, during the crisis or response to the crisis and after the crisis or post-crisis. Some crises are predictable and we have more opportunities to be prepared for them. Some are very difficult to predict. The second stage is during the crisis time which is the most critical stage. Because there is a time pressure and urgency and we need to react very quickly. For instance, as the coronavirus spreads so quickly we need to react as fast as possible. The third phase is after the crisis which is the time

for recovery and do preparation for the future. This is also important to reflect on what we have learned during the crisis and evaluate our strengths and weaknesses.

Some crises are known while some are mainly unknown. In countries that experience earthquakes frequently people are mentally ready for the earthquake as they expect it happens at some point and most of them are not very serious. As a result, although an earthquake is always an unfortunate but not a shocking event in some regions. However, when the level and impact of the crisis is unknown it is more difficult to deal with. As the coronavirus epidemic never happened before and we were not ready for it, now have to tolerate a high level of uncertainty. Moreover, though there have been many pandemics during the history, the nature of COVID-19 and the way it spreads is unprecedented. Besides, the world we are living at the moment is totally different from last century or before that. We live in a network society with global economy that every parts of it is related to the whole and any changes in each part will affect everyone. Therefore, we do not know when the disaster will stop and how long we have to wait to come back to normal. Even someone might argues if the crisis continues for a long time we need to redefine the meaning of normal life and get used to a new lifestyle. Nonetheless, this is too early to make any prediction and we just need to tolerate this inevitable uncertainty for a while, hope for the best and prepare for the worst.

5. Three approaches to face a pandemic

Any pandemic as a global crisis has its own unique features. First of all it affects all aspects of life across the globe. Therefore, in our networked global society a pandemic is far more than just a health crisis. This is an economic, financial and social adversity. Uncertainly about the period that it will exists makes it very difficult to plan. Furthermore, the way that libraries can contribute to the society in the pandemic time is very different from other upheavals. For example, in the time of an earthquake or a flood people can use the library building as a shelter. But in the time of pandemic people must observe social distancing and cannot come to the library building until the situation comes back to normal. Therefore, librarian should find new methods to serve the society during the pandemic. By reviewing the current reactions to coronavirus we can categorise them into three categories: passive reactions, active practice and proactive initiatives. This paper explains these different approaches and at the end concludes we need to move towards proactive initiatives.

5.1. Passive responses to the pandemic

Passive reaction is the minimum level of reaction which is not recommended as it does not provide valuable services in the time that many people need. In a passive reaction library minimises its interaction with the community to stop the spread of the virus. Closing the library and stopping all the services is the main action a passive reaction policy. Since the public health organisations realised how fast the virus can spread they recommended all governments to reduce

social interactions as much as possible. Therefore, since mid-March 2020 almost all public libraries around the world are temporary closed.

Although indefinite shutdown seems inviable to reduce the risk of disease spread, there are a number of unwanted consequences. Robertson (2006) highlighted a few hazards such as security risks during prolonged closures, vandalism, break-ins and burglaries. Moreover, as the staff are away from their workplace and there is very limited inspections of the building and facilities some problems will arise because of neglecting routine maintenance. Therefore, the library management team needs to make sure the buildings are safe during the closure time. In general, the passive approach is useful but the least beneficial option as its only benefit is collaborating with other sectors of the society to stop the spread of virus.

5.2. Active practice during the pandemic time

Active practice during the pandemic provides alternative means of providing information services to the public. Public libraries in this category identifies the most pressing information needs of the public in the pandemic time and try to provide the most relevant, reliable and recent information to address their needs. In the time of epidemic people need to know what the symptoms of the disease are and what treatments are available and the library can provide online services to address this issue. Moreover, they can consider some changes in the staff duties and introduce new areas of work. For example, usual face-to-face storytelling or book clubs can be done virtually and staff can run them from home via Facebook or other platforms.

Featherstone, et al. (2012) investigated delivery of pandemic information by health librarians and recommended a number of strategies including incorporating library strategies and services into the organizational disaster plan, instructing and training librarians on the use of alerting tools, techniques and credible resources about disaster information, anticipating required resources to provide dedicated services, and planning on new assessment methods to enhance the capacity of health information centers to effectively response to the future epidemics.

Similarly, Hart (2001) stated on a number of issues that still need to be addressed about the HIV/AIDS pandemic like the availability of information resources on HIV/AIDS; the role of community libraries in the campaign against AIDS; the role of school libraries in AIDS education; the need for the public library to play a more positive resource centre and clearing house role. She also called for more partnership among libraries, schools, health workers and NGOs to fight the disease.

Since the beginning of the coronavirus pandemic several library associations issues special declarations about this health emergency trying to provide advices for librarians and information professional. American Library Association (ALA) has developed a special page dedicated to this issue providing guidelines

about different aspects of this issue including criteria for closing the library, employee policies for sick leave, policies for social distancing, criteria for suspending story times and other library programs, provision of masks and gloves along with the training of staff, standards for the cleaning of workstations, setting a schedule for seeing to the critical needs of the facility if the library is closed for an extended time, means for continuing to provide information services, addressing needs of people in the community who rely on library resources and educating the public (ALA, 2020). Likewise, Australian Library and Information Association (ALIA) published a document and declared as corona continues to affect communities across the country, since 4 March 2020, ALIA has responded by taking a number of steps such as: cancelling ALIA national conference in line with health advice regarding social distancing, as an effective intervention in the minimisation of the spread of infectious disease, preparing online space for libraries to share their knowledge, strategies and communications around responding to the pandemic. They also encouraged members to let them know how their library is responding to the emergency, in order to keep this information updated. Moreover, they have started communication with other associations about how to address this crisis (ALIA, 2020).

The other area in this category is the role of public libraries to help their users to fight with misinformation and disinformation. These two terms mean false or incorrect information but they are to some extent different. Although sometimes they are used as equal, they have different meanings. Misinformation is misleading, wrong, incorrect or inaccurate information. However, disinformation is deliberately false information to hide the truth and intentionally mislead people. Misinformation such as rumors typically come from unawareness and ignorance, while disinformation is purposefully designed to mislead people. In a nutshell, misinformation is inaccurate information and disinformation is deceptive information. Fake news is one of the common forms of disinformation in the information society (Batchelor, 2017 and Rubin, 2019). Information professionals can play an important role to help people filter misinformation and disinformation through various methods such as information literacy programs. During the time of pandemic when the library is closed librarians can run these program via online platforms. Specially, information literacy programs are very critical in this stage. The literature in this area shows public libraries have been very active in this area (Harding, 2008) and just need to transform their services into virtual format as many have already done so. Moreover, competencies necessary for the staff to deal with the crisis in another area for consideration. Yoshida (2016) reported that creating a space for autonomous learning and empowerment is one of the main duties of public libraries.

5.3. Proactive initiatives to face the pandemic effectively
Proactive actions are based on original ideas and are intended to create new changes, rather than just reacting to the changes. Developing new means of

providing information services is an effective form of proactive initiatives. To be more proactive in the first step we need to reflect on the past relevant experiences. Quinlan (2007) tried to answer a big question about what we can learn from the way American libraries responded to the 1918 influenza pandemic. She stated:

"What can libraries do? Every library should have both a disaster plan and a continuity plan in place. When their environment is in crisis, libraries must continue to meet the information needs of their users and to provide community sanctuary and support. The training and talents of library staff can play a critical role in providing information and help during a pandemic." (P. 52)

This is what we can call an effective proactive initiatives. McGuire (2007) investigated collaboration of academic librarians at the University of Minnesota's Bio-Medical Library on the emergency planning for the teaching program task force in the School of Public Health in a pandemic influenza outbreak. The result shows librarians can use their experience and expertise during the challenging time. They can deliver their services in four levels: (1) very basic such as e-mail only, (2) basic such as post class material online, administer exams, and use online discussion boards, (3) interactive level to deliver pre-recorded oral presentations of lecture (audio with slides or video with audio) and finally (4) highly interactive such as live audio presentations with synchronous discussion.

The concept of innovation and creativity is very important in this context. Hunter and Bruning (2010) showed in their paper how in the time of economic crisis, all stakeholders can create original and creative approaches to lessen pressures and continue collaborations for the benefit of everyone. Other scholars also pay specific attention to creativity (Li, 2006). Obviously, during the history librarians and information professionals have played various roles in different crises. However, there is still room for improvement as Lopatovska, and Smiley (2014) reported that although LIS research has been concerned with institutional disaster readiness in disastrous circumstances, LIS scholars still need to explore the dynamics of information during disasters.

This is a very important as it demonstrates information professionals have focused on one aspect more. Library association also can help in this category. For instance, ALIA recently created an informative webpage entitled "Australian libraries responding to COVID-19" to collect useful information about libraries activities across the country and also invite other libraries to share their news with others via this page so they can have a complete picture of how libraries are responding to the pandemic. This page includes several sections including public libraries virtual story times, copyright guidance for libraries during the COVID-19 shutdown and multi-lingual communication resources (ALIA, 2020).

Chartered Institute of Library and Information Professionals (CILIP) in the UK also developed a webpage entitled *Coronavirus Information Service* which includes various relevant parts such as a detailed statement concerning COVID-19, current risk level, general advice and guidance, sector-by-sector statements on coronavirus and libraries, coronavirus support from the government and CILIP policies and procedures on this issue. (CILIP, 2020)

6.   Planning for the future and after the disaster

Libraries not only should focus on the existing situation but also they should be prepared for the future. They can learn from their successes and failures and consider knowledge management techniques to create, capture, organise, develop and transfer knowledge in this area, as (Alajami, 2016) called for more actions in terms of preventative measure as libraries must keep a record of all disasters and their frequencies, impacts and significances. This is possible to achieve this goal via using knowledge transfer methods. Moreover, library staff need to learn how to capture the useful techniques of crisis management.

Another direction that we need to consider is about reflecting the concept of crisis management in LIS curricula. We need to make sure that LIS curricula are preparing professionals to manage crises. At the moment most LIS curricula do not cover enough guidelines about crisis management in libraries and other information agencies. We can consider this issue in various modules such as collection development, library management and so on. Furthermore, as Gwyer (2010) emphasized on fact that libraries should focus on human capital in times of crisis, and adapt to the rapidly changing information climate.

Moreover, there are other relevant areas. In order to conceptualise it, crisis informatics, also known as disaster informatics, is a term coined by Christine Hagar in 2006 and she defines it as interconnectedness of people, organizations, information and technology during crises which includes the human side of communicating and dissemination of information when technology infrastructure stops working during the crisis (Hagar, 2010).

7.   A matrix of preparation for and reaction to a pandemic

Regarding the abovementioned approaches and the stages of preparation we can envisage a matrix illustrated in figure 1. As you can see in the matrix, libraries with a passive approach have no specific plans for the crisis time. As a result, they have to shut down the library just to help reducing the spread of the disease. While the libraries with active practice have some plans and are almost ready to react appropriately. They have a committee, or in smaller libraries a member of staff, who is responsible to monitoring crisis information tools and techniques. Finally, libraries with proactive initiatives are one step ahead of them. They have already done some preparations and are ready to actively engage with crisis management teams whenever they need them.

During the crisis time the three groups are also in different situations. The first one has to shut down the library and stop all the services. Their only contribution is just helping to reduce the speed of pandemic. However, the second group with an active approach has some services to offer. For example, they stop their face-to-face services but resume their online services. Finally, the third group is one step ahead. As these libraries have been fully ready to face the challenge they are able to introduce new creative services. For example, they might start some digital storytelling programs for the users or run virtual sessions.

After the crisis these three categories will go through different routes. The first group just resume their previous services without any reflection of what has happened. The second group will reflect on their experiences during the pandemic time and try to learn from their successes and failures. The third group not only reflect on their experiences, but also welcome new original ideas and keep their plans updated for the future.

Stage Style	Passive Approach	Active Practice	Proactive Initiatives
Before the crisis	No strategic plans & no disaster team	Having a strategic plan & form a disaster team	Active preparation, active disaster team, monitoring
During the crisis	Closing all current activities & events	Cancelling some events & programs	Running new alternative & creative programs
After the crisis	Resuming the same previous practice	Reflecting on the pandemic time and modify the practice	Learning from the pandemic, modify practice, fostering creativity

Figure 1. The matrix of preparation for the pandemic

8. Conclusion

Public libraries have different approaches in terms of crisis management and the way they plan for crisis and face them when they occur. Libraries with passive policy do not have robust strategies in this area and as a result are not able to play an effective role in disastrous situations such as a flood or a disease pandemic. While, libraries with active policy in terms of crisis management offer alternative activities when they are not able to operate in a normal way.

Finally, libraries with proactive initiatives are always one step ahead and have a strategic plan for crises such as pandemic. They consider the pandemic time as a learning opportunity and learn from difficult time to be more prepared for the future. Therefore, they learn from their successes and failures and constantly monitor and modify their practice accordingly. Nonetheless, they know there is always room for improvement and as a result they keep fostering creativity and innovation. They have disaster management teams planning for future. Basically, what we need most for the future is having more libraries with proactive initiative approaches.

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