Exploring Library Disaster Management Preparedness and Responses in Malaysian Academic Libraries

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Abstract. Disaster management, whether natural, man-made, or health-related, is integral to library management. The purpose of this paper is to investigate the preparedness and response of academic libraries to the disruption of library services during the Covid-19 pandemic. This paper presents qualitative findings from multiple case studies conducted at academic libraries in Malaysia. The data were subsequently subjected to thematic analysis. The results disclose how Academic Libraries expanded/modified their public service policies in response to the disaster, particularly the Covid-19 pandemic. Changes in roles in the provision of services and facilities that are more necessary during a disaster are shared by library managers and can serve as benchmarks for other libraries to implement as necessary. Academic libraries in Malaysia are perceived to have a strategy and their own plans to respond to a disaster crisis, but they lack a formal disaster management plan. This study's findings provide several significant practical contributions for library professionals to ensure the continuity of their services in the event of a disaster. It can also serve as a baseline for policymakers preparing disaster response policies, guidelines, or manuals.

Keywords: Academic libraries, library management, disaster management, Covid-19.

1   Introduction

Over the past two years, humanity has collectively confronted a global disaster that has dramatically impacted various aspects of human existence, including physical

health, social dynamics, and material prosperity. Disasters have the potential to manifest in any location, rendering their occurrence unpredictable and challenging to forecast. The occurrence of natural disasters can be attributed to human activities, sometimes referred to as man-made disasters. In addition, technological disasters and health-related crises can contribute to the overall spectrum of disastrous events (Alajmi, 2016; Braman et al., 2010; Galbusera et al., 2021; Harris, 2021; Ilo et al., 2020; Welsh & Higgins, 2009; Winston & Quinn, 2005). As per the World Health Organization's report in 2007, most of disasters and emergency crises do not transpire at opportune moments but manifest abruptly, leading to catastrophic devastation and loss of life. Disasters are unforeseeable occurrences that result in loss of life, impact individuals, devastate several commercial entities, and alter the natural environment (Padli et al., 2018; Rosselló et al., 2020). In a recent occurrence, a significant natural disaster transpired, leading to extensive devastation throughout multiple states in Malaysia. Specifically, numerous large regions experienced disaster flooding on December 20, 2021, due to intense precipitation (Media Mulia, 2021).

Similarly, Pakistan has experienced significant monsoon rains and subsequent floods in September 2022, leading to a loss of around 1700 lives and impacting a minimum of 33 million individuals throughout the country (OCHA, 2022). The flood tragedy has destroyed about 200,000 houses, with an additional 450,000 houses suffering varying degrees of damage. Furthermore, the storm has also caused significant damage to approximately 18,000 schools. The flash floods and rainfall resulted in a significant loss of income for numerous communities, leading to the demise of more than 700,000 cattle and the devastation of about 2 million acres of crops and orchards (Donate to Paki-stan Floods, 2022).

In Malaysia, the initial forecast can be obtained through the regulatory body known as the Malaysian Space Agency (MYSA). MYSA utilizes the Flood Information and Logistics System, which relies on Space Technology, Geographic Information System, Global Positioning System, and Information and Communication Technology (ICT). However, it is important to note that the event's actual occurrence was beyond human influence or manipulation. The flood disaster in Malaysia in 2021 resulted in significant damage and a death toll exceeding 25 individuals (BERNAMA, 2021). A man-made disaster refers to a precarious situation that arises due to human actions. According to the EM-DAT database (2019), instances of man-made disasters can be categorized into three distinct groups: industrial accidents encompassing chemical spills, explosions, gas leaks, poisoning, oil spills, radiation incidents, and fires; transport accidents involving air, road, rail, and water; and a miscellaneous category encompassing accidents such as building collapses, explosions, and fires. Conversely, the occurrence of disasters can also be attributed to outbreaks of infectious diseases, which are influenced by natural, social, and geopolitical factors. For instance, the global ramifications of the 1918 Spanish influenza pandemics (Oshitani et al., 2008) and the ongoing coronavirus disease 2019 (COVID-19) pandemic (Alabdulmonem et al., 2020) exemplify this connection.

The onset of a public health crisis occurred in Wuhan, China in December 2019, caused by the SARS-CoV-2 coronavirus, as documented by Shah et al. (2020). The swift and extensive transmission of the virus, leading to a significant number of

fatalities, prompted the World Health Organisation to officially designate it as a worldwide health emergency on March 11, 2022. This crisis is commonly referred to as the Coronavirus Pandemic Crisis (Author, Year). The detection of the Covid-19 Pandemic in Malaysia was initially observed on 23 January 2020, prompting the Malaysian government to enforce a Movement Control Order (MCO) on 18 March 2020 to mitigate the transmission of the pandemic. During the implementation phase of the Movement Control Order (MCO), a significant portion of public and commercial sectors are restricted from operating at full capacity, except for essential services. The omission of library services from the list of essential services has been a significant issue for both library management and customers alike. The library is widely recognized as a repository of knowledge and serves as a central hub for accessing comprehensive information and references across all disciplines.

The occurrence of diverse calamities in the global context (Braman et al., 2010; Ghosh, 2013) significantly affects the provision of academic library services. The closing of the library service operation has led to a range of services that are not readily accessible to users. Due to the crisis caused by the disaster, the physical provision of library services and research consultations was severely hindered. The closure of the library was necessitated by the significant impact of the Covid-19 contagion, which led to a substantial loss of lives (Cowell, 2020; Galbusera et al., 2021; Kosci-ejew, 2020). The cessation or disruption of service delivery to users is a consequence of this phenomenon (Cervone, 2006; Fani & Subriadi, 2019). The design and implementation of many plans and initiatives pose problems for library administration in their efforts to effectively deliver library services and disseminate information to users. Hence, the primary objective of this study is to investigate the management of disasters in academic libraries within the context of Malaysia. The definition of security in the commercial realm has undergone a transformation, extending beyond its traditional confines as a purely technical concern. From this standpoint, the significance of information security becomes apparent as it aims to establish a connection between the various business factors that impact the safeguarding of informational assets. The integration of these factors is increasingly seen as essential components of the core business, since the protection of information and knowledge is crucial for achieving success, maintaining competitiveness, and ensuring survival in the globalized market.

2   Literature Review

In Malaysia, Siti Juryiah (2013) reported that academic libraries in Malaysia are still not prepared for disaster and most of them do not have a written disaster preparedness plan. According to Wong and Green (2007) in their theoretical study on library disaster planning, they emphasized that the availability of a disaster manual is important so that libraries can immediately refer to the plan and make effective and timely decisions. Previous studies highlighted the important elements of disaster management in libraries.

2.1 Disaster in Libraries

Harris, (2021), in his study of five academic libraries in Jamaica, Caribean, discovered that 100% of the sample libraries lacked or did not have their own disaster management plan. 25% of libraries have a sub-divisional disaster management plan as part of the organization's overall strategy. While having a sub-section of a disaster management plan is aesthetically pleasing, libraries should establish their own, more comprehensive plan. Researchers (Clark & Guiffault, 2018; Drabek, 1985; Mulia & Programme, 2004; Sylves, 1994) have cautioned about the lack of global standardization and policy studies pertaining to disaster management, which includes prevention; preparedness; reaction; and recovery. Academic libraries in Malaysia appear to be in similar circumstances. It is essential to construct a resilient organization capable of withstanding negative disaster impacts and risk. Although many studies on disaster management plan or emergency plan have been conducted in various social science fields around the globe, few of these studies specifically address academic libraries in disaster management. Malaysia, a country with a low frequency of natural disasters, must now be more vigilant in the face of all disaster types that can irreparably disrupt library services. It is therefore timely to investigate the preparedness, response, rehabilitation (recovery), and mitigation plans of Malaysian academic libraries in the event of any form of disaster. The Sendai Framework for Disaster Risk Reduction 2015-2030 (Tozier de la Poterie & Baudoin, 2015) is one of the good disaster management frameworks that can be used as an example or benchmark to better the understanding of disaster risk in all its dimensions. With a clear and comprehensive disaster management guideline, it is believed that library services can be implemented and provided to library users at any time, regardless of the disaster.

Disasters are one of the most frequent events, whether they occur naturally or as a result of carelessness and human fault. The word "natural disaster" generally refers to a terrible phenomenon that happens abruptly and causes a lot of harm and deaths. According to cause and effect, there are many different definitions of disasters in literature. According to the United Nations Office for Disaster Risk Reduction (UNISDR, 2009), a combination of risks, weaknesses, and a lack of precautions lead to disasters. In truth, some finding from literature reveal that the world and life on it have undergone numerous evolutionary changes and have evolved in response to disasters occurrences like the Big Bang, volcanic eruptions, significant floods, climate change, and others. When opposed to now, the repercussions and consequences of this disaster on human life were considerably different in prehistoric times. ReliefWeb is one of the databases that offers somewhat comprehensive information about disaster incidents. According to Wolz and Park (2006), it seeks to "be the leading online gateway for information on humanitarian emergencies and disasters" worldwide. ReliefWeb has consolidated into an online platform that provides the humanitarian community with other services beyond logistics to find the most pertinent news, reports, maps, analyses, and other content. In terms of emergency updates, ReliefWeb has noted that 432 catastrophe incidents have taken place globally, whereas over the years 2001–2020, an average of 364 disaster occurrences each year took place and caused significant harm, devastation, and death (Centre for Research on Disaster Epidemiology, 2021).

Table 1.1: Occurrence of Disaster World Wide from 2001-2021
(Sources: ReliefWeb Statistics)

Disaster by Type	2021	2001-2020 (Average)
Flood	223	163
Earthquake	28	27
Extreme temperature	3	21
Drought	15	16
Landslide	14	18
Mass movement (dry)	0	1
Storm	121	102
Volcanic Activity	9	5
Wildfire	19	11
Total	**432**	**364**

2.2 Disaster management plan

A disaster management plan is a document that contains comprehensive guidelines created with the help of numerous government and non-government organizations to cope with and deal with a disaster. By providing relief to the disaster region as soon as possible, it concentrates on saving lives. Reducing the negative effects of disasters is the overarching goal of disaster management (Chiderah & Iroeze, 2021; Eden & Matthews, 1996; Wong & Green, 2007). In order to collaboratively mitigate, prepare, respond to, and recover from varied and dynamic sets of disaster to society, disaster management frequently calls for numerous autonomous agencies. By getting help to the disaster location as soon as possible, it is hoped to prevent human deaths and property damage (Braman et al., 2010). Prepaedness, response, recovery, and mitigation are the basic steps in the disaster management cycle (Chiderah & Iroeze, 2021; Eden & Matthews, 1996; Wong & Green, 2007). When developing a disaster plan, it's crucial to have a disaster management plan in place. It is a document that outlines a series of guidelines and steps to take in order to accomplish both short- and long-term goals in order to deal with a disaster or regulate future actions. Majlis Keselamatan Negara (MKN), or Malaysian National Security Council, is in responsibility of developing a crisis management plan and ensuring the country's and its citizens' health and safety. Standard operating procedures (SOP) have been designed to minimize the effects of various hazards and disasters, provide assistance when it is needed, and construct a recovery mechanism to guarantee that the lives of the affected populations resume to normal (Majlis Keselamatan Negara, 1997). Under the directive of MNSC 20, these SOP apply to all concerned agencies. In particular, academic libraries lack a comprehensive disaster management policy or set of regulations even though the National Security Council of Malaysia regulates disaster management.

According to Mohd Khalid & Dol (2015), 58.8% of Malaysia's academic libraries lack funding for disaster preparedness, and 47.1% lack a disaster plan. They recommended that other researchers conduct additional research on (i) the issues of developing disaster management plan policy, (ii) why academic libraries do not have written disaster management plans and (iii) the need to discover library disaster response and recovery among academic libraries in Malaysia. A written disaster preparedness strategy for academic libraries should be made available, and the library staff should be included in creating this disaster management plan for their institutions, according to Chiderah & Iroeze's (2021) recommendation. This is since a well-developed disaster handbook is crucial for the library because it allows them to act quickly, refer to the essential action plans at any time, and make decisions that will help them respond to a disaster effectively and on time. According to Crichton et al. (2009), the greatest strategy to improve resilience inside an organization is through emergency planning, often known as disaster planning. In the meanwhile, Harris (2021) contends that being prepared is the best way to handle disaster. The International Decade for Natural Disaster Risk Reduction's Yokohama Strategy, which was launched in May 1994, marked the start of an integrated disaster management strategy (United Nations, 1994). The Yokohama approach underlined that in order to accomplish the goals and objectives of vulnerability reduction, disaster prevention, mitigation, and readiness are preferable to disaster response. Preparedness, response, recovery (rehabilitation), and mitigation are the four stages that make up the disaster management cycle (Chiderah & Iroeze, 2021; Eden & Matthews, 1996; Wong & Green, 2007). To address this issue, libraries must have a thorough documented disaster preparedness plan or a dedicated planning checklist.
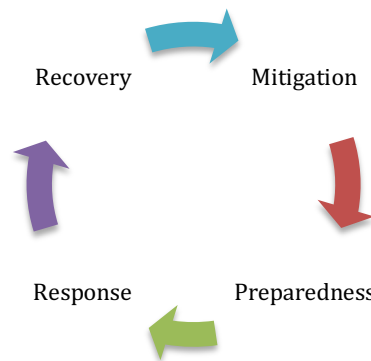
Figure 1: Disaster management cycle (sources : (Chiderah & Iroeze, 2021; Eden & Matthews, 1996; Wong & Green, 2007)

2.3 Impact of health disaster / health emergency in Library role and services

The Covid-19 pandemic was initially discovered to be spreading in Malaysia on January 23, 2020, and on March 18, 2020, the Malaysian government put in place a Movement Control Order (MCO) in order to mitigate the transmission of the pandemic

throughout the community. (Shah et al., 2020). Most of the public and commercial sectors are not permitted to operate completely throughout the MCO implementation phase, except for the necessary services. The list of essential services does not include library services. The management of the library as well as all library users face difficulties because of this circumstance. The library is a well-known repository of knowledge and a place to find all relevant information in any field. Numerous services that the patrons cannot adequately use as a result of the physical shutdown of the library service operation. For instance, offering physical book loans, in-person research assistance, reference services, or information literacy programmes is impossible. However, libraries in Europe and other countries have taken immediate action to ensure that borrowed materials are safe to use and that library services can continue to be provided in accordance with the standards established by their governments (International Federation of Librarians and Institutions (IFLA), 2020). For example, Public Health England recommends that paper and cardboard-based materials must be separated within 24 hours, while plastic-based materials should be isolated or quarantined for 72 hours. Similarly, practices by Australia, Egypt, Brazil and the Czech Republic government, they also implemented guidelines a quarantine period of 72 hours of library materials. While libraries in Switzerland, the Netherlands, Belgium, Lebanon, Slovakia and France segregate the loan material returned is separated between 2 to 10 days. Similarly, the Italian Ministry of Culture, the Andalusian Library Association and the Slovenian Public Health Agency proposed that the period of segregation of library materials be 2 weeks. Prevention and self-protection practices are also seen in most of the libraries. (International Federation of Librarians and Institutions (IFLA), 2020) For example to determine the reopening of library operations, the first step is to create guidelines for the maximum number of users that can be in the library. At the beginning of the service operation at the National University of Croatia Library, the library allowed only 200 people to use the library while in the Russian National Library only allowed 100-150 people can use the library space at a time. (International Federation of Librarians and Institutions (IFLA), 2020)

The role of libraries in providing information and online support services in pandemic crisis has been the subject of numerous studies in the literature (Ahmed et al., 2018; Ali & Gatiti, 2020; Chisita, 2020; Wang & Lund, 2020). As physical libraries close, digital libraries services become more active in providing online information and support services to their users to support learning. According to Chisita (2020), libraries may play a significant role by improving their ability to disseminate information so that people can take preventative steps against COVID-19. Through the creation and distribution of information to communities via social media, webinars, and a particular website concerning pandemic crisis on their website, librarians raise health awareness. On the other hand, the library must also strengthen its strategic plan for supporting open and distance learning (ODL) for the teaching, learning, and research processes in the event of a disaster (Mtega & Benard, 2014). University librarians must possess the necessary expertise and abilities to manage this online learning technique in order to provide this service. Especially when employing digital platforms (or what we refer to as the "digital library initiative"), library services have changed as a result of the introduction of new technology and learning systems like open and remote learning.

These tools and technologies can take the shape of electronic media, including the internet, different e-learning management systems like Blackboard and Moodle, video conferencing, compact disc memory, digital versatile discs, tele-vision, satellite, and audio/video tapes. By providing technology-based information resources and services, digital library initiatives and platforms take on a more crucial role in enabling users to access pertinent knowledge whenever they want. In accordance with a study done by Koulouris, Vraimaki, and Ko-loniari (2020) depending on the availability of technological tools and budgets, most libraries provide a variety of remote and digital services, such as teleconference (23.8%), tele-education and webinars (13.2%), as well as online (via email, Viber, Messenger, etc.) and phone reference assistance and library instruction (12.7%). The library should use a free learning management system to integrate and display its material and services. Additionally, libraries should develop additional platforms and material that facilitate access to digital goods and services. According to Chisita (2020), libraries can use and maintain active links to give users access to trustworthy and credible resources in virtual spaces, provide users with digital literacy training, and connect users to trustworthy websites or information through virtual library services.

The literature that was studied revealed that there are still not many scholarly articles on disaster management among academic libraries; a policy or a formal guideline needs to be developed to deal with any form of disaster in the future; a survey of academic libraries in other geographic areas is required; consequently, this paper attempts to answer this gap, through the following examination.

What preparatory steps are implemented by academic libraries in Malaysia in response to the occurrence of a disaster?

What response actions are implemented by academic libraries in Malaysia during the occurrence of a disaster?

3 Methodology

This study employs qualitative research methodologies to investigate the issue of disaster management in the academic library, with the aim of shedding light on many factors related to this topic. Additionally, this research examines the strategies employed by libraries and librarians in mitigating the impact of disaster on their library services and facilities. It explores the proactive measures (responses) and preparedness initiatives undertaken to minimize the adverse effects of such events. The research is constrained to five (5) Malaysian Academic Library (AL) establishments and employs a qualitative methodology to gather data pertaining to the readiness and reaction of librarians considering the Covid-19 pandemic's disruption of services. This study places emphasis on collective knowledge by separately examining each selected AL. A semi-structured interview guide was produced by drawing upon relevant literature and the author's expertise, with the aim of obtaining primary data from the participants. The purpose of employing a standardized set of questions is to ensure that informants are presented with a consistent range of inquiries, so facilitating the potential emergence of any additional elaboration within the specific contextual circumstances. The participants in this study consisted of a specific cohort comprising Chief Librarians,

Library Managers, and Librarians who possess decision-making authority and are actively engaged in the formulation of library policy. The purpose of this endeavour is to document the real-time encounter and get more comprehensive insights on the measures and strategies that have been enacted to address the potential hazards associated with disasters. The interviews were conducted in person in the library office and recorded using audio recording technology. Following each interview session, the audio recording is securely stored in both the computer and Google Drive as a precautionary measure to mitigate the risk of any potential loss. The audio recordings of each interview were transcribed by repeatedly listening to the conversations and rewriting them in a Microsoft Word document, based on the responses provided by the informant. In order to ascertain the integrity of the transcribed interview data, it is thereafter subjected to a process of re-reading and comparison with the corresponding audio recording. This is followed by the dissemination of the transcribed data to the informant for member checking purposes.

4 Finding

In-depth interviews with AL managers to obtain information on how libraries prepare in the face of any disaster, revealed various interesting findings. Library managers in Malaysian academic library shared their experiences in dealing with disasters such as major floods, fungus / fungus attacks and health disaster (pandemic covid-19).

Table 4.1: Occurrence of Disaster World Wide from 2001-2021

Disaster Events/ Library	Floods	Fungal attacks	Covid-19
Lib1	X	X	X
Lib2		X	X
Lib3		X	X
Lib4		X	X
Lib5		X	X

Although leakage on the library roof is not suitable to be defined as a disaster, however, if it is not repaired and appropriate action is taken, it can become a major disaster such as damage to the library's furniture, equipment and collection and harm people if the roof collapses.

4.1 Malaysian academic library disaster experience

a. Floods

The geographical location in Lib 3 is exposed to flood disasters throughout the monsoon season (around November to early January), however Lib 3 already has standard guidelines and procedures to deal with flood disasters (based on their parent organization SOP document). While in terms of services, when a flood occurs that

results in users not being able to come to the library, Lib3 will activate fully online services and carry out aggressive promotions so that library users can continue to use the various services that have been provided online like access to the electronic resources (e-books, online databases, etc), and consulting and references services.

b. Fungal attacks

Several AL have had and are still experiencing problems related to fungal attacks on library collections. Many factors contributed to this problem, among them, due to the unstable temperature in the library, splashing rainwater due to a leaky roof, damaged air-conditioning, and flooding, Lib1 experienced a fungal attack on their book collection. To overcome the problem of fungal attacks on the library collection, Lib1 tried the fumigation (responses) method using poisons such as methanol and methylene dolomite. The fumigation method carried out is according to the schedule and according to the division of the collection. While in Lib4, problems stemming from the air conditioning system caused the library collection to be wet and mouldy. It is one of the most critical disasters that has happened in the library. This causes the level of cleanliness (hygiene) in the mouldy book collection to affect the health of students.

c. Covid-19

The Malaysian government has implemented the Movement Control Order (MCO) to curb the spread of the Covid-19 epidemic starting on 18 March 2020. As a result of the physical closure of services, AL have responded immediately by creating various initiatives so that users can continue to use library services. Through the interviews conducted, some AL have taken swift and immediate action through ad hoc initiatives and improved existing services as appropriate as a result of the closure of physical operations. Among the initial responses implemented by AL are (i) extending the book return period (ii) not charging fines, (iii) floating the fine rate (if any) throughout the MCO period, (iv) doing sanitation and cleaning works more regularly in communal work, (v) creating awareness programs related to the covid-19 pandemic, (vi) giving free access to digital collections related to the covid-19 virus, (vii) online programs / open webinars, and many more. The variety of initial responses from each of these libraries, if well documented, can be used as benchmarks or references by other libraries (all type of libraries also can be used). For example, Lib1, Lib2, Lib 3 and Lib 4 have offered book loans by post / book delivery service throughout the movement control order period.

During the MCO phase 2 announced by the government and staff can enter the library building with a very limited number of staff allowed, all AL have taken immediate action to carry out sanitation work on equipment, furniture, and infrastructure such as stairways, entrances and so on to disinfect the covid virus -19. The library also rearranged the chairs in accordance with the distancing recommendations outlined by the Malaysian Ministry of Health in preparation for the gradual opening of physical operations.

4.2 Malaysian academic library disaster preparedness and responses in occurrence of disaster events.

The interview participants were requested to provide an account of their preparation planning strategies and their response mechanisms in the face of disasters. Furthermore, the participants were also queried regarding their strategies and the novel services they have introduced in the periods preceding and following the pandemic. The qualitative data analysis revealed the identification of three primary themes: (1) the library preparedness strategy, (2) the response action and response plan, and (3) the library services, encompassing both existing and new norm services. The qualitative data analysis programme AtlasTi version 23 was utilized to analyze the data. Table 4 presents the identified themes, sub-themes, and corresponding remarks and comments provided by the interviewees.

Table 4.2: Library Preparedness and Responses

Theme	Sub-Theme	Quotation
Disaster Preparedness	Planning and Coordination	"…library will empty 3 bays in each shelf and store the book collection, and the loan of the book collection will be postponed for one to two months depending on the weather and flood conditions" – Lib3
		"…bring up all electronic equipment to a higher level". – Lib3
	Risk Assessment	"…the management has taken control and prevention measures to reduce the impact of the flood disaster" – Lib3
	Communication Strategies	"...the library has an early expectation about the possibility of flooding...we use the medium of email, pop-up info on the library website and posters as early information about the closure of physical services and users can use online services – Lib3
Disaster Response	Resource Mobilization	"…rescuing equipment such as computers, TVs, and other equipment that were on level one and taken to level two" – Lib3
	Coordination	"…we received a phone call from the university's security department informing them that the library building had been flooded and asked to be present the next day to monitor and also make an immediate action" – Lib3
		"…Each collection that is fumigated is placed in a special container and then sprayed with poison and left for 2-3 days

		to kill all insects so that this collection is free from fungal attacks" – Lib1
	Documentation and Reporting	"…library staff conducted stocktake and counted the number of damaged books for the disposal process" – Lib3
Library Services and Resilience	Continuity of Library Services	"…the collection of books is not disposed of or thrown away because it can still be used even if the condition of the book looks worn"– Lib4
		"…Before the pandemic, the library did not have a postal service for the existing book collection, but during this pandemic, users who need physical books for the purpose of leisure reading, learning and teaching can make an application, and the library will send the books they want to borrow by post"– Lib1
		"…the library staff will send the books they want to borrow around the campus (or users can pick them up at the guard post"-Lib2
		"…users who want to borrow books during the MCO period need to make a reservation either using the library's OPAC, email or calling the counter staff, and inform the date to pick up the book(s)". -Lib5
	Online/Digital/ Mobile Library Services	"…Among the positive and good sides as a result of this pandemic disaster, online services can be improved, and awareness of the variety of electronic resources offered by the library is realized and used by the library. Therefore the library has taken full advantage by further improving the delivery of online services to library users".- Lib 5
	Crisis Hotlines	"…apart from the chat service, the library has used the whatsapp application as a speedier medium of communication with users during covid-19 crisis".-Lib2

5 Discussion

All informants from AL who have been interviewed informed that the library does not have their own or a specific policy related to disasters whether due to natural disasters, man-made disaster or health disasters which supported by Siti Juryiah Binti Mohd Khalid, (2013). Most of the policies or policies related to disaster in the library are referred to in the University's master document and certain clauses according to the suitability of the department will be included as sub-items in the University's master policy. While in terms of disasters as a result of the covid-19 pandemic, disaster management and safety measures to curb the spread of the covid-19 virus, each library will first follow the guidelines set by the National Security Council (MKN), the Ministry of Health Malaysia (KKM), the Committee State Safety and Health, and the Committee that has been formed at the University level. Despite this, academic libraries must plan and establish a more comprehensive policy for disaster management based on past disaster management experience as a guide for the future. The library also needs to create standard operation procedures or guidelines according to the suitability and needs of the library to face this pandemic crisis (Fernando & Jayasekara, 2020; International Federation of Librarians and Institutions (IFLA), 2020). It is imperative that library services and operations continue and are provided as soon as feasible, given that libraries are public information hubs. In accordance with a 2017 survey conducted by the Pew Research Centre (Horrigan 2017), 78% of respondents believe that libraries facilitate them in locating credible and trustworthy information. In this study, it was discovered that libraries consistently provide information pertinent to infodemics, such as current research on covid-19, real-time data about pandemics in countries, etc., and that this information is fed via the library's website or chat services.

The library provides input and collaborates to think about what is best to implement during the covid-19 crisis period. They can collaborate with disaster response agencies, government organizations, and community stakeholders to disseminate up-to-date information about evacuation routes, emergency shelters, medical services, and other essential resources (Young, 2018). The infrastructure of libraries can be utilized to provide affected individuals with Internet access and communication facilities so that they remain connected and informed. Moreover, during disasters, role changes in the provision of services and facilities are more important. When physical services cannot be provided, library administration and librarians are perceived to be very quick and adaptable in deploying digital technology as a substitute service. In addition to being very active in interacting with and providing services to their patrons, librarians in this study are viewed as being very engaged in their profession. They are also very active in organizing webinars in various disciplines of knowledge that are accessible to both their internal users and the public. The library is able to implement the concept of open education to their users (Chisita and Chizoma, 2021) because the organization of these numerous webinars is conducted in collaboration with a variety of parties. As a result of these efforts, libraries and librarians are able to provide more effective value-added services, especially as facilitators, moderators, and knowledge aids. Even when the library was physically unavailable to its patrons, the library's flexibility and adaptability was the most essential factor in providing uninterrupted service to those patrons.

6   Conclusions

Libraries face significant difficulty in crisis situations due to the need to adapt to new standards and services for patrons. It requires an appropriate contingency plan for such crises in the future. These changes will make the service transformation process in a better direction, practical and usable in any situation in the future. In-depth interviews with Library Managers disclose how AL modified and expanded its public service policies in response to disaster events. As a guide for the future, academic libraries must plan and develop a more detailed disaster management policy based on their experience coping with disasters. There have been numerous varieties of disasters, which can occur at any time and without warning. It is crucial that library services and operations continue and are provided as soon as possible, given that the library is a community hub for obtaining reliable information. In addition, the provision of services and facilities that are more essential during disasters requires a shift in roles. When physical services cannot be provided, library management and librarians are perceived to be very quick and adaptable in applying digital technology as a replacement service. Additionally, librarians are perceived to be very active in communicating with and serving their users. In addition, they are seen to be very active in organizing webinars in various disciplines of knowledge that are accessible to both their internal users and the general public. This competency allows librarians to provide more effective value-added services, particularly as facilitators, moderators, and knowledge advisers. Through this study and the experience shared by library managers it can be used as a benchmark for other libraries to use as appropriate in their libraries. This research has demonstrated that their proactive involvement in disaster preparedness and response considerably helps to the well-being and resiliency of the communities that they serve. Additional study is required to investigate the specific tactics and procedures that, when implemented, might improve the efficiency with which libraries manage disaster situations, which, in turn, will be to the overall community's benefit.

Acknowledgments

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