### PalArch's Journal of Archaeology of Egypt / Egyptology

### "Delivering an information resources service to users' homes to ensure Healthcare during COVID -19: Case study"

Dr. Muntaha Abdul Kareem Jasim University of Baghdad- Iraq Email: muntahajasim@dcec.uobaghdad.edu.iq

Dr. Muntaha Abdul Kareem Jasim, Delivering an information resources service to users' homes to ensure Healthcare during COVID -19: Case study, -- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(6), 16673-16686. ISSN 1567-214x

Keywords: Information providers, healthcare. Universities college Libraries, COVID-19, Information delivery, Information services.

#### ABSTRACT

University college libraries are one of the most important information institutions for all researchers during their research and study life, they seeks to provide information sources such as; books, periodicals, theses, databases, Inquiry service and answering questions services in various disciplines to achieve its goals.

In 2020, college libraries of all types stepped up to meet the needs of their users' as they responded to the impacts of COVID-19, also extended necessary lifelines to community members facing job losses, healthcare crises, and remote work and learning during an unprecedented and uncertain time.

The research aim to identifying the services provided to the postgraduate students users at University of Baghdad college libraries at Al-Jadriya campus, and to in light of the provision of remote services 1/2/2020-30/5/2021

Research methodology used a questionnaire tool distributed for random sample about (55) male and female students was selected, consisting of (25) doctoral students and (30) master's students. With different specializations (scientific and humanitarian), and the research suggested and recommended:

- 1. Allow to the users to visit the college libraries while maintaining social distancing between them and information providers.
- 2. Providing home delivery service, by training workers to be information delivery services, and providing them all supplements for the purpose of ensuring the success of this service.
- 3. Adopting a set of applications available to facilitate the access of resources to the users in their homes without the need to visit libraries, such as (Curbside Communicator), The Princh application, etc.

### 1. Introduction

All Libraries usually have protocols for acting and planning preventive measures in the face of fires, floods and earthquakes in areas where their geo-climatic conditions are more susceptible to a phenomenon of this nature.[i]. However, a large-scale situation such as the pandemic caused by COVID-19 disease has rethought the way of working and the safety measures established in any type of library in the world. [ii] so the world faced hard choices about which services to offer and how?, ranging from minimal restrictions to full closure, In 2020, libraries of all types stepped up to meet the needs of their communities as they responded to the impacts of COVID-19, this Pandemic has resulted in extraordinary situations where global economies have been shut down using lockdown procedure to prevent the spread of this disease. Libraries have responded by offering their services online through digital access yet remaining closed to the public [iii]. For a great challenge for health care professionals, a public health crisis as an information crisis lack of relevant, misinfo, or disinformation or even info overload, public health leaders, government, policymakers, and general public to make timely and informed decision to combat the crisis, therefor WHO (2020c) proclaimed that:' we are not just fighting an epidemic; we are fighting infodemic."[iv]. Wing to the limitations of COVID-19 conditions, time and other aspects, there was not any opportunity to visit the university college libraries or book time to interview librarians or students, which led to limited level and imperfect research. There are many other activities that university libraries are offering to their employees and using their internal newsletters and email groups to reach their audience; As a result, some of digital services that are offered during COVID-19 might have not been noticed[v]. Many academic institutions and libraries have recognized that students need wireless hotspots and laptops if they are in situations with limited access to technology, but have we thoroughly considered the needs of patrons with disabilities[vi]. While a lot of libraries seeks to provide virtual support to their users, such as providing references, document delivery, literature search and systematic reviews. Some libraries have started webinars and sessions to keep in touch with their users via Google Classroom, Google Hangouts, Skype or Zoom. [vii]. Libraries also extended necessary lifelines to community members facing job losses, healthcare crises, and remote work and learning during an unprecedented and uncertain times[viii]. Sometimes ordering the closure of all institutions, others indicating that life should simply continue as usual, and others leaving decisions up to library directors to deal with the situation.

Today, Libraries and information institutions are facing a major challenge in the performance of their functions and Staff towards their users many global university libraries, international publishing houses and databases witnessed major transformations in providing their services to users to confront the Covid-19, and worked to make their resources available and free access. So many information institutions, international Unions and libraries have sought to facilitate free access to information, such as IFLA; International Federation of Libraries Association. [ix] another libraries provided Wi Fi services for users, and some libraries provided medical devices and maker space to supply masks, Expanding access to services (e-cards, deaf/blind/disabled expanded options, fine forgiveness, upping checkout

limits, providing online assistance, setting up a helpline.[x]. As a result of the library staff's experiences, some Academic libraries test a Zoom TV equipment's In the front of the library to maintaining a socially safe distance between staff and users and to keep library staff safe during COVID-19. Additionally, and sharing video conferencing software pre- and post-pandemic. [xi], and to be more careful library staff has a key inquiry about how to contact with materials, conveying coronavirus

Information services represent a vital element in the institutions of libraries and information centers and the true measure of the success of the institution, and providing the service is the main goal with the aim of satisfying the users. [xii]

As expected libraries works on how to raise up the level of information service provision and to deliver its services while ensuring health care for its users and librarian information suppliers and all staff? How to keep social distance between users and its staff to prevent the spread of infection without any injury? ...and other questions that come to mind in all libraries, what's the next step if libraries re-open its doors again to the users, and supply information resources face-to-face, so libraries had to take the necessary precautions for social distancing, which will reduce the risk of spreading Corona virus to each of the librarians and users, at same time in line with the library's goals and focusing on using information and communication technology and employing it to support researchers in obtaining resources through their presence in their homes under the slogan (Stay at home, be safe) With these transformations, questions have arisen about the level of provision, circulation and sharing of information resources, ensuring the achievement of the goals for which university libraries were established.

In Iraq, there is a group of university college libraries that had an important role in addressing the epidemic such as; University of Baghdad libraries. Al-Nahrain University Libraries, Al-Mustansiriya University libraries which are Contributed to the provision of its services and sources of information digitally (online) to the users for the reason of the new global crisis Corona virus since December 2019. And it worked to spread awareness to preserve its employees and was keen to comply with the conditions of health prevention and wearing masks, as well as adherence to social distance. in fact, and in light of the pace of transformation and the pursuit of employing information and communication technology to instantly transform their services into online platforms, where users can access them from home, This includes promoting digital access to resources but faced difficult situation because most of college libraries have no facilitates esystem operation for borrowing and returning e-books to the readers or using the loan period ends, moreover; lack ICT infrastructure is not reliable, network problems, beside the lack of information services providers skills, including technical and e-application programs, this is some simple problems Iraqi college libraries witnessed, furthermore some difficulties in providing e-books to everyone, because many users (including our sample) still prefer paper copies rather than electronic copies to keep them on hand;

The research came to reveal the level of readiness of Iraqi college universities libraries in light of these strategic shifts as an important and vital resource in the life of every researcher in general and the most importance for (MSc and PhD) students.

- Building a standard list of the necessary requirements that should be provided by information suppliers in university central libraries as they represent the information resource in light of the Corona virus pandemic.
- Adopting rules and policies to deal with future crises, especially when (home curfew) occurs, including finding new ways to communicate information.

### 2. Research Problem:

The main question of the research problem is the:

- 1. How was (COVID-19) affected the services provided in university libraries?
- 2. Knowing what is the minimum level of readiness of university library departments in providing the requirements for postgraduate students (MSc and PhD) to overcome COVID- 19 pandemic and obtain resources?
- 3. How to use modern applications to gain researchers requirement within health care conditions?

### 3. THE AIM OF THE RESEARCH:

- 3.1: The research aims to identifying the services provided to the postgraduate students (Masters' and doctoral degrees) users under the Coronavirus pandemic 2020-2021
- 3.2: This research may contribute to pay the attention of researchers in the field of information and libraries towards enriching this trend with studies and research on the role of information sources and facilities in supporting and enhancing new virtual environments, and adopting modern experimental methods and methods to preserve the health of beneficiaries and library workers to face difficult cases similar to the epidemiological situation.
- 3.3: The future vision and highlighting a set of applications that university libraries can adopt to facilitate the provision of service for researchers and maintain their health safety.

### 4. RESEARCH METHODOLOGY:

- 4.1: Using a descriptive analytical approach, and reviewing a set of published research, and adopting a questionnaire to analyzing the results.
- 4.2: The research adopted: An Online Survey and documentary approach in collecting information and data related to university libraries activities under the Coronavirus pandemic.

### 5. THE SAMPLE:

- 5.1: The Sample of the research: (55) master's and Doctoral students consisting of (25) doctoral students and (30) master's students. With different specializations (scientific and humanitarian), (21) male and (34) female students was selected during visiting libraries, and some survey answers came online, to fulfill the requirements of the research topic.
- 5.1: To visit a group of Baghdad University college's libraries at the Jadiriyah camps to see the services that they provided during Covid-19 pandemic: the General Secretariat of central library, College of Education for women Library, College of Science Library, Al-Khwarizmi College of Engineering library, Laser Institute Library. College of Engineering library, collage of science for woman libraries

5.3: Relying on the answers of online questionnaire due to the difficulty in visiting all libraries and communicating with their employees and Ph.D. and MSc users due to the suspension of work and staying at home

### 6. PRE-STUDIES

### 6.1: Libraries respond to Covid-19 pandemic and future impacts. [xiii]

The study reflects three possible scenarios of activating libraries during the pandemic; the first scenario is to activate libraries during the lockdown with providing far-distance services, the second; is to activate libraries during partial lockdown which requires a set of precautious procedure, the third; is a complete activation of libraries. The conclusion, adapted new policies are expected to rise as working from home policies and libraries policies. The study recommends that support should be provided for Arab libraries in order to be ready to provide services for its society during the outbreak of pandemics and epidemics.

# 6.2: The importance of university libraries to train workers with information. $[x^{iv}]$

Most university libraries work on subscribing to electronic databases with the aim of facilitating beneficiaries' access to the full texts of research published in periodicals, and indexers work to make these sources available from different databases and establish different information systems. The study recommended, training program for information specialists and service providers on how to deal with e-resources and rent databases to guide and help users to know how to use and deal with e- information sources.

## 6.3: University libraries response to COVID-19 pandemic: A developing country perspective $\begin{bmatrix} xv \end{bmatrix}$

The aim of the study was to conduct an exploratory investigation on university libraries in Pakistan' response to the COVID-19 pandemic. By collecting data interviews of purposely selected Heads of seven university libraries. The interview recordings were transcribed, and the study recommended:- Libraries need to rewrite library policies and realign their practices for the new circumstances to serve the patrons and abide by social-distancing standards because COVID-19 and how to develop standard operating procedures (SOPs) for staff and library users to abide by social distancing standards during and after the COVID-19 pandemic.

### 6.4: The COVID-19 (Coronavirus) pandemic: reflections on the roles of librarians and information professionals [xvi]

This paper reflects on role of librarians during a pandemic in the context of Pakistan:

- 1. to promote public health awareness by creating and disseminating information relating to preventive measures;
- 2. to support research team, researchers and faculty by providing information regarding the latest developments, research and literature;
- 3. to meet the core needs of regular library users

The paper concluded that these three activities will continue for as long as necessary. A need for information exists in every crisis; librarians and information professional must be ready to meet this need whether it is for COVID-19 or something else. Although social distancing is a good way to prevent the spread of COVID-19, information access to users remains a social responsibility of all librarians and information personnel.

## 6.5: COVID-19 and digital library services – a case study of a university library.[xvii]

This paper is to describes the library's various digital services that are used to meet the needs of its end-users. Furthermore, it details how the library has adapted some existing services into a digital format and explored new initiatives/practices to support the university's full online teaching and learning and providing insights and practical solutions responding to the global health crisis for other libraries that are coping with the similar challenges for digital library services.

This research came to give and recommend some ideas on how to use delivery service to Developing traditional and electronic library services by investing the services of delivering applications to the users' homes and ensuring the preservation of their and their family's health in addition to the possibility of benefiting from this plan to provide job opportunities for the unemployed.

### 7. RESEARCH TERMS:

7.1: Coronaviruses or (COVID-19) Pandemic is defined for surveillance purposes as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case.[xviii]. It's a large family of viruses which may cause disease in animals or humans.[xix] single-stranded positive-sense RNA viruses that are known to contain some of the largest viral genomes,[xx]. For the first; it was dedicated in Wuhan City/ China, at December 2019,(WHO.2020) [xxii], declared COVID-19 an epidemic and much later a Pandemic due its fast spread around the world, people can be infect through droplets from an infected person to others in close contacts. 7.2: Health care services are the sum total of public and private services and institutions provided by the state to take care of the health of its citizens, whether in its sector or within the private sector, and it is entrusted with the approach of the patient. It includes all hospitals, clinics, pharmacies, human resources, including doctors, nurses, engineers, medical devices, technicians, researchers, and all those who work in this field. [xxii]

7.3: Information services: the output obtained by the users of the information, which is achieved through the interaction and availability of devices and material and human resources. The services are related to the nature of the beneficiaries' activity and their needs. [xxiii]

### 8. THE OBJECTIVE ANALYSIS OF RESEARCH

In order to complete the research requirements on the field side, the questionnaire tool was used to cover the research topic, with the aim of obtaining data covering an aspect of the research. The form of the questionnaire achieved an agreement of

more than (80%) after some modifications were made to some of its items to adopt its final version.

### 9. DISCUSSION

University college libraries seek to serve scientific research and provide services to all categories of users. At all times, whether in its traditional form or via Internet, one of its most important services is the internal and external borrowing of publications, taking into account the number of borrowed publications and the quality of information sources. Such as:

- 1. Traditional or electronic information services.
- 2. Current Awareness services
- 3. Internal and external borrowing services.
- 4. Search on catalogs services.
- Database search service.
- 6. Referral service to other sites.
- 7. Social media service
- 8. Contact us

With the emergence of the Covid-19,, many libraries were closed, and for the purpose of restoring life and activating their role, and University of Baghdad college libraries took a lot of prevention measures, sought to develop the performance of its employees, the efficiency of providing its services, one of its most important aims is to market its traditional and electronic information services to all users at any places, and worked to make the resources available to researchers access for free, as well as establishing health cultural programs and electronic workshops using electronic platforms.

The home shopping online service is one of best choice for every persons, provision of the delivering services was able to be a source of confidence for the most of users in obtaining the required commodity connected directly to the home without the hassle of going to it. Delivery services have been relied upon in shopping and purchasing devices, tools, clothes and accessories, in addition to orders for ready food. Which made it easier for the researcher to think about how to investing this service and its experience in communicating and delivering information resources from university libraries to the users, especially for postgraduate students.

A questionnaire was adapted to a group of (25) doctoral students and (30) master's students. With different specializations (scientific and humanities), to adopt the results of the analytical questionnaire

The important of two questions asked for users:

- 1. Do you think delivering service help you to work on your project during corona virus?
- 2. Do you think the delivery service can be the alternative plan for future adoption in obtaining sources of information?
- 3. Do you think that the information delivery request service is an effective way to ensure that the health care of the users is preserved and not exposed to injury?

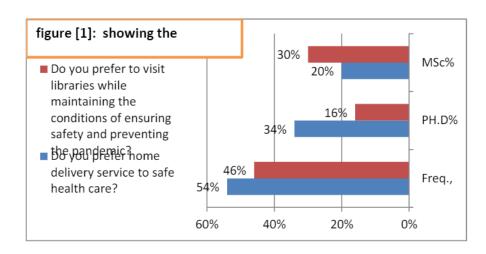
Table [1]: showing the percentages of requirements Information services for (MS.C and Ph.D) users' delivery program					
Seq.,	Type of Services	Frequenc	Percentage	levels	
		y	s		
1.	E- current awareness service	4%	6.5%	5 <sup>th</sup>	
				level	
2.	The Information delivering service and sources to home	35%	28.5%	1st level	
3.	Cooperative loan service from	25%	15.5%	2 <sup>nd</sup>	
	other library sites through the library			level	
4.	Electronic Abstracts Service	4%	6.5%	5 <sup>th</sup> level	
5.	Retrieval Information Service	8%	10.5%	3 <sup>rd</sup> level	
6.	online e-book download service	8%	10.5%	4 <sup>th</sup> level	
7.	Academic reviews service for			4 <sup>th</sup>	
	recent published books and sources	8%	10.0%	level	
8.	Selective Electronic information	8%	10.5%	4 <sup>th</sup>	
	transmission service			level	
	Total	100%	100%		

- To analyze the answers of **Table [1]**: item no. (2) Recorded as a first level, the item no.(3) followed as a second level.
- The researcher points out that the reason for this is the desire of the users;
- 1. To obtain their sources by request, while they are at homes.
- 2. To maintain their families safety, the concerned university college library or other university college libraries.
- 3. While there is a convergence in the proportions for the items :(5.6.7.8). Except for item No.(1.4), which came in last place
- For the purpose of communicating with the users and knowing the type of libraries service they Preferred, they were asked the following question:
- 1. Do you prefer home delivery service to maintain your health care?
- 2. Do you prefer to visit libraries while maintaining the conditions of ensuring safety and preventing the epidemic?

Table [2]: showing the percentages of type service for (PH.D and MS.c)						
Seq.	Type of Services	Freq.,	PH.D %	MSc%		
1.	Do you prefer home delivery service to safe health care?	54%	34%	20%		

2.	Do you prefer to visit libraries while maintaining the conditions of ensuring safety and preventing the pandemic?	46%	16%	30%
	total	100%	50%	50%

- To analyze the answers of **Table [2]**: The researcher find item no.(1): **Do you prefer home delivery service to safe health care?** Recorded as the **first choice**: for (PhD. Student)/(54%), for the reason:-
- 1. To maintain themselves and their families safety.
- 2. To give a chance and offers jobs for young people to work on delivering information requests for users' houses.
- 3. Some answers that to get a chance to spend more times with their families. **See figure[1]**
- While item no.(2) came in the second level: Do you prefer to visit libraries while maintaining the conditions of ensuring safety and preventing the pandemic? (46%), for the reason:-
- 1. To spend more times between libraries shelves and have time to look for more resources.
- 2. To browsing books by self and have more options.
- 3. Difficulty dealing with technologies or using them in searching and obtaining information sources
- 4. They prefer not to use delivery services it may cost them (5000) ID = (8\$) for each delivery request. **See figure[1]**

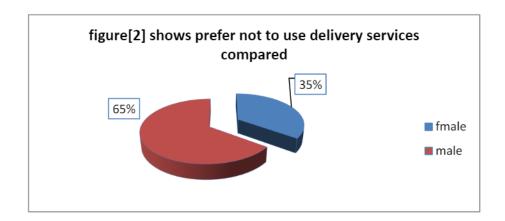


- And the result of (PhD and MSc) percentage choice **Table [2]**:

The results of the analytical questionnaire, which showed that there are negative indicators related to obtaining resources for (Masters) students/(30%), comparing to (doctoral)/(16%) and this can be explained by their limited tendencies to obtain the main resources in their research.

- As well as (Masters) students need for information service providers to support them with resources, at fastest time, and with the least effort.

- The final and most likely reason is because they do not have the experience of accessing information comparing to PhD students, and they need information source specialist or librarian for guide and help.
- 1. For Gender: The research recorded that the percentage of the second choice came from answers given to males (65%) compared to females (35%), the reason is that most males prefer to leave home and visit libraries to search for sources by themselves. See **figure[2]**
- 2. They need a quiet place Equipped to read and work in their research, away from the noise of the house



The important question for information providers: The question is the extent to which information providers in university college libraries are willing to work on preparing the required information for users?, and how much time is used to prepare and deliver the application?. On the other hand, knowing the willingness of the selected users (the sample) to adopt and accept this service.

The answer of information providers: there is no objection to working in this service because they are experienced in providing the service, and they can provide it as soon as possible.

If this service is approved: The university college libraries administration is responsible for the workers who deliver orders, and their training needs in this field

The following results came out:

- 1: The idea of adopting the project of communicating users' requests by the University of Baghdad college libraries departments needs support, for two important reasons:
- 2: The first reason: the need for financial support to facilitate the information delivery service.
- 3: Second: the need for human resources with capabilities to work in the delivery field.
- 4: The users have a positive vision about the information delivery service to their homes, as they need information sources, even though the idea varied between a very clear vision and a simple vision, but it gives a positive indication of the

existence of an acceptance of the idea of work under the circumstances of the Corona virus pandemic.

5: The users believes by future vision Beneficiaries hope to return to normal life, visit university libraries, overcome the Corona epidemic, or adopt some of libraries services applications available by using social distance to keep them within healthcare conditions.

### 10. CONCLUSION:

In conclusion as an expected college libraries should works on how to raise the level of information service provision and delivers, and to put a new strategy to deal with any disasters in future. Other side, work on to Spreading the culture of how to maintain the healthcare of its employees and its information suppliers in taking prevention and ensuring the implementation of instructions related to social distancing, and focusing on the importance of achieving the library's goals in satisfying the users by providing information sources through websites or by delivering information requests. Suggesting a set of recommendations:

- 1. Attention to achieving the highest level of interaction between providers of information services in university libraries and postgraduate students (MSc and PhD degrees) by resorting to the use of programs and interaction platforms to answer inquiries and equip students with their resource needs.
- 2. Ensuring the effectiveness of transformation The provision of information services remotely requires computerizing the sources and facilitating their access to graduate students, and this can be achieved by reformulating the service provision (copying the source) and delivering it to (the beneficiary's home) in order to deal with the Coronavirus pandemic and maintain the safety of the users under the current circumstances.
- 3. Providing studies based on surveys to identify the reasons for the user's satisfaction with information sources in light of healthcare.
- 4. Collage libraries should adopting rules and policies to ensure access the information sources in all their (traditional and electronic ways) to their users and deal with crises at the future, especially when (home curfew) occurs, including finding new ways to communicate information.
- 1. The importance of the staged application is a success factor for the application of services that deliver out print information services requests to the users.
- 2. The importance of providing comprehensive information services in multiple forms at one distance from everyone and delivering them in light of the Corona pandemic.
- 3. Providing support and equipment for workers to deliver requests from information sources to beneficiaries' homes
- 4. The need to pay attention to providing electronic services, providing information sources and databases for researchers, and facilitating access to them
- 5. The future vision or trend is to use a set of systems generated by the need such as (Curbside Communicator) as a means of delivering materials to the beneficiaries while adhering to safe social distancing policies, and this communication can achieve the dual goal of serving the library to the beneficiaries while protecting the library staff from direct contact, which may be inappropriate security.

- 3.1: The Curbside Communicator app automates reservation processes and creates a simple communication link between patrons and library staff to facilitate the receipt of required information resources over a designated space and specified hours within the library to receive the requested information resources. In other words, it is a way to provide library materials to beneficiaries, where the patron puts the material on hold and when he is notified that the reservation is ready, the patron goes to the library in a designated space inside the library to get the materials required. Library staffs are notified and bring users's materials to their vehicle, resulting in a remote and contactless interaction. [xxiv]
- 3.2: Return IT: it's an automated system use to delivering books borrowed by the users to the library. It can be install in or outside libraries walls and operated during days and hours. as a containers of various sizes, enabled and linked to the local borrowing system of the library, which It updates user records whether the containers are delivered at any time, and sorts the containers into categories for ease of processing by staff, which thus books are delivered without contact between staff and library users, and the library also helps reduce waiting lists, and the burden on library staff It allows them to focus their time in providing a wide range of other modern services. [xxv]
- 3.3: The **Princh** application: it's a cloud-based printing and payment platform designed to save time and reduce interaction between users and librarians staff within the library; users send documents to library printers from their own devices using the Princh mobile application or web browser. When printing from mobile devices, users can download the Princh app, import the document to be printed into the application, and then choose the library printer. In addition, the Princh the Princh app shows a map of nearby Princh-enabled printers. As for printing on a laptop, it is printed via a browser. [xxvi]

### 11. REFRENCESS

<sup>&</sup>lt;sup>1</sup>] . Featherstone, R.M., Lyon, B.J. and Ruffin, A.B. (2008), "Library roles in disaster response: an oral history project by the national library of medicine", Journal of the Medical Library Association : Jmla, Vol. 96 No. 4, pp. 343-350. et al., 2008)

ii] Ortega-Martínez, E.d.l.Á., Pacheco-Mendoza, J., García Meléndez, H.E., Ortiz-Díaz, E.M. and Saavedra-Alamillas, C. (2021), "Digital services adapted by libraries in Mexico to COVID-19 pandemic: a critical review", Digital Library Perspectives, Vol. 37 No. 1, pp. 3-17. https://doi.org/10.1108/DLP-07-2020-0063 iii] Samanta, Mousumi, Library Access Policies Post COVID-19 Pandemic (May 25, 2020). Available at SSRN: https://ssrn.com/abstract=3610042 or http://dx.doi.org/10.2139/ssrn.3610042

iv]. Yu, Fei; Mani, Nandita. How American Academic Medical/Health Sciences Libraries Responded to the COVID-19 Health Crisis: An Observational Study. Data and Information Management; Warsaw. Vol. 4, Iss. 3, (2020): 200-208. DOI:10.2478/dim-2020-0013

<sup>&</sup>lt;sup>v</sup>] . Serdar Temiz , Lakshmi Pradip Salelkar. Innovation during crisis: exploring reaction of Swedish university libraries to COVID-19. Digital Library Perspectives. Emerald Publishing Limited. 25 November 2020. ISSN: 2059-5816 . Available at

- website:https://www.emerald.com/insight/content/doi/10.1108/DLP-05-2020-0029/full/html
- vi]. JJ Pionke. COVID-19, accessibility, and libraries: A call to action. College and research libraries. Association of College & Research Libraries. Vol 81, No 8 (2020), DOI: https://doi.org/10.5860/crln.81.8.398
- vii] . Muhammad Yousuf Ali & Peter Gatit. The COVID-19 (Coronavirus) pandemic: reflections on the roles of librarians and information professionals. First published: 06 April 2020. https://doi.org/10.1111/hir.12307
- viii] . State of America's Libraries Report **2021**. ALA. American Libraries Association. Special report Covid-19. April.2021. Cited on 20/05/2021. Available on website: https://www.ala.org/news/state-americas-libraries-report-2021
- <sup>ix</sup>]. COVID-19 and the Global Library Field. IFLA (2020). Cited on 30/06/2021. Available on website: https://www.ifla.org/covid-19-and-libraries
- x] . Public Libraries Respond to COVID-19: Survey of Response & Activities. . IFLA (2020). Cited on 21/06/2021. Available on website: https://www.ala.org/pla/issues/covid-19/march2020survey
- xi] . Russell Michalak, Monica D. T. Rysavy. Keeping Library Staff Safe: Using Zoom TVs to Bridge the Gap Between In-Person and Virtual Service Consultations During COVID-19. Journal of Library Administration. Volume 61, 2021 Issue 5. Available on: https://doi.org/10.1080/01930826.2021.1924534
- xii] .Mohammed Aman. The Internet in libraries and information centers. Tunisia. Arab ALESCO.2000.
- xiii] . Bakhit . Samir Ibrahim (2020). Libraries respond to Covid-19 pandemic and future impacts. Iraqi journal for information. Volume 21, Issue 1.2, Pages 32-56
- xiv] .Sadik .Jinan, Shaima Hamid (2011). Basic Education College Magazine For Educational and Humanities Sciences. Vol., 201. Issue 5, Pages 53-72
- xv] . M Rafiq, SH Batool, AF Ali, M Ullah . University libraries response to COVID-19 pandemic: A developing country perspective. The Journal of Academic Librarianship, Volume 47, Issue 1, January 2021, 102280. Available on website: https://www.sciencedirect.com/science/article/pii/S0099133320301713
- xvi]. Muhammad Yousuf Ali & Peter Gatit. The COVID-19 (Coronavirus) pandemic: reflections on the roles of librarians and information professionals. First published: 06 April 2020. https://doi.org/10.1111/hir.12307
- xvii]. Dipti Mehta, Xiaocan Wang. COVID-19 and digital library services a case study of a university library. Digital Library Perspectives Journal. Volume 36 Issue 4. Article publication date: 25 June 2020. ISSN: 2059-5816
- xviii]. WHO; World Health Organization. Coronavirus Disease 2019. (COVID-19) situation report-94. 23 April.2020 . Available on website: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200423-sitrep-94-covid-19.pdf
- xix] . WHO Q & amp; A on coronaviruses (COVID-19) March 2020, https://www.who.int/news-room/q-a-detail/q-a-coronaviruses.See: Ahmad et al., A Review of COVID-19 (Coronavirus Disease-2019) Diagnosis, Treatments and Prevention / doi: 10.14744/ejmo.2020.90853
- xx]. Schoeman D, Fielding BC. Coronavirus envelope protein: Current knowledge. Virology Journal. 2019; 16 10.1186/s12985-019-1182-0. Available on website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6537279/

- xxi] . WHO; World Health Organization. Transmission of SARS-CoV-2: implications for infection prevention precautions. Liu J, Liao X, Qian S, Yuan J, Wang F, Liu Y, et al. Community Transmission of Severe Acute Respiratory Syndrome Coronavirus 2, Shenzhen, China, 2020. Emerg Infect Dis. 2020;26:1320-3.
- xxii] . WHO; World Health Organization. See : https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/quality-of-care
- xxiii] . Al-Alaq , Bashir. Information technology applications in business: a marketing approach. Amman Al Warraq Foundation Publishing. 2000
- Communicator. Retrieved 17/6/2021. from https://uniquelibrary.com/curbside-communicator-uniques-software-for-quick-and-easy-curbside-hold-pickup
- xxv] . Implementing Contactless Library Book Checkouts and Returns. Retrieved 19/6/2021 . From :https://smiota.com/resources/implementing-contactless-library-book-checkouts-and-returns/
- xxvi] . Julija Gavrilova.New self-service printer solution Library. From https://www.sølvberget.no/Kontakt-oss2/Information-in-English/New-self-service-printer-solution-Library