

## Informacijske usluge visokoškolskih biblioteka u Federaciji Bosne i Hercegovine za vrijeme pandemije covid-19

### Information Services of Academic Libraries in Federation of Bosnia and Herzegovina during The Covid-19 Pandemic

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#### Sažetak / Abstract

Globalna pandemija prouzrokovana virusom COVID-19 bitno je utjecala na poslovanje u visokoškolskim bibliotekama u cijelom svijetu, a cilj ovoga istraživanja je utvrditi kako su javne visokoškolske biblioteke u Federaciji Bosne i Hercegovine prilagodile i/ili redefinirale svoje bibliotečko-informacijske usluge pandemijskim okolnostima rada. Za potrebe prikupljanja takvih podataka, anketirani su samo bibliotekari/ke onih javnih visokoškolskih biblioteka koje imaju kontakt (e-mail) na web stranici fakulteta / akademije / univerziteta, a samo istraživanje, koje je kvantitativne prirode, realizirano je korištenjem posebno kreiranog anketnog upitnika, upotrebom Google Forms, u junu 2021. godine. Od ukupno 47 mapiranih biblioteka, 26 biblioteka je sudjelovalo u ispunjavanju ankete (ukupno 55,3%). U ovom istraživačkom radu, koji je prvi ove vrste u Federaciji Bosne i Hercegovine, donose se pristupi visokoškolskih biblioteka koje, za razliku od visokoškolskih biblioteka iz razvijenih evropskih zemalja, djeluju u vrlo specifičnim uslovima koje, prije svega, karakteriziraju ograničeni i nedovoljni budžeti za nabavku građe, ali i nedostatak osnovne IT opreme. Rezultati pokazuju da su uprkos zatečenim, često neodgovarajućim elementarnim uslovima rada, visokoškolski bibliotekari ulagali izvjesne napore orijentirane ka zadovoljenju informacijskih potreba korisnika tokom svjetske zdravstvene krize, ali i da je pandemija naglasila hitnu potrebu digitalne transformacije istraživanjem obuhvaćenih visokoškolskih biblioteka.

The global pandemic caused by the COVID-19 virus has significantly affected library processes and procedures in academic libraries worldwide, and the aim of this study is to determine how public academic libraries in the Federation of Bosnia and Herzegovina (FB&H) have adapted and/or redefined their library and information services to pandemic circumstances. For the purposes of collecting such data, only librarians of those public academic libraries who have contact information (e-mail) displayed on the faculty / academy / university website were surveyed. The research itself, which is of a quantitative nature, was realized by using a survey questionnaire, which was created on Google Forms, in June 2021. Out of a total of 47 mapped libraries, 26 academic libraries participated in the survey (response rate of 55.3%). This research paper, which is first of its kind in Federation of Bosnia and Herzegovina, brings approaches of academic libraries which, unlike academic libraries from developed European countries, operate in very specific circumstances which are primarily characterized by limited and insufficient budgets for procurement of collections but also basic IT equipment. Results showed that despite the found inadequate elementary working conditions, academic librarians made certain efforts aimed towards meeting the information needs of library users during the world health crisis, but also that the pandemic emphasized the urgent need for digital transformation of surveyed academic libraries.

## 1. Uvod

Oblast obrazovanja i kulture, u Bosni i Hercegovini je decentralizirano uređena, gdje na nivou entiteta postoje ministarstva nadležna za pitanja kulture, i to u Republici Srpskoj Ministarstvo prosvjete i kulture, a u Federaciji Bosne i Hercegovine Ministarstvo kulture i sporta. U Federaciji Bosne i Hercegovine nadležnosti u oblasti kulture dalje su na nivou kantonalnih / županijskih ministarstava. Brčko distrikt Bosne i Hercegovine ima odjel nadležan za pitanja u oblasti kulture. Na sličan način organizirano je i obrazovanje. Oblast obrazovanja je u nadležnosti entiteta gdje Republika Srpska, deset kantona / županija u Federaciji Bosne i Hercegovine i Brčko distrikt Bosne i Hercegovine imaju svoja ministarstva nadležna za obrazovanje, budžet za obrazovanje. Oni utvrđuju obrazovnu i udžbeničku politiku, kao i sva druga prava i obaveze koje proističu iz mandata nadležne obrazovne vlasti odgovorne za organizaciju i funkcioniranje obrazovanja na svom području odgovornosti. Na nivou entiteta Federacija Bosne i Hercegovine, Federalno ministarstvo obrazovanja i nauke ima koordinacijsku ulogu.

Kao jednu od posljedica decentralizacije politike na prostoru Bosne i Hercegovine i Federacije Bosne i Hercegovine imamo i pojavu decentralizacije politika visokog obrazovanja što je dovelo i do uspostave velikog broja visokoškolskih ustanova u Bosni i Hercegovini, organiziranih kao javnih i privatnih. U Republici Srpskoj postoje dva javna univerziteta, Univerzitet u Banja Luci sa 17 članica (16 fakulteta i jedna akademija)<sup>1</sup> i Univerzitet u Istočnom Sarajevu sa 16 članica (15 fakulteta i jedna akademija).<sup>2</sup> U Republici Srpskoj postoji i 6 privatnih univerziteta. Brčko distrikt nema javnog univerziteta, ali ima dva privatna univerziteta.<sup>3</sup> Drugi entitet, Federacija Bosna i Hercegovina posjeduje 6 javnih univerziteta (Univerzitet u Sarajevu, Univerzitet u Tuzli, Univerzitet u Zenici, Univerzitet u Bihaću, Sveučilište u Mostaru, Univerzitet "Džemal Bijedić" u Mostaru) i 6 privatnih univerziteta.<sup>4</sup>

Spomenuto složeno državno uređenje sa velikim brojem visokoškolskih institucija, pojavom epidemije uzrokovane teškim akutnim respiratornim sindromom koronavirus 2 (engl. *Severe acute respiratory syndrome coronavirus 2*) – SARSCoV-2, u martu 2020. godine donosi nove i iznenadne promjene u cijelom obrazovnom sektoru pa i u području bibliotekarstva te pokreće pitanje prilagodbe toj

## 1. Introduction

The field of education and culture in Bosnia and Herzegovina is decentralized, where at the entity level there are ministries responsible for cultural issues, in the Republic of Srpska the Ministry of Education and Culture, and in the Federation of Bosnia and Herzegovina the Ministry of Culture and Sports. In the Federation of Bosnia and Herzegovina, competencies in the field of culture are further at the level of cantonal / county ministries. The Brčko District of Bosnia and Herzegovina has a department in charge of cultural issues. Education is organized in a similar way. The field of education is under the jurisdiction of the entities where the Republic of Srpska, ten cantons / counties in the Federation of Bosnia and Herzegovina and the Brčko District of Bosnia and Herzegovina have their own ministries responsible for education and the budget for education. They determine the education and textbook policy, as well as all other rights and obligations arising from the mandate of the competent education authority responsible for the organization and functioning of education in its area of responsibility. At the entity level, the Federation of Bosnia and Herzegovina, the Federal Ministry of Education and Science has a coordinating role.

As one of the consequences of decentralization policy in Bosnia and Herzegovina and the Federation of Bosnia and Herzegovina, we have the emergence of decentralization of academic policies, which has led to the establishment of a large number of academic institutions in Bosnia and Herzegovina, organized as public and private. There are 2 public universities in Republic of Srpska, the University of Banja Luka with 17 members (16 faculties and one academy)<sup>1</sup> and the University of East Sarajevo with 16 members (15 faculties and 1 academy).<sup>2</sup> There are also 6 private universities in Republic of Srpska. Brčko District does not have a public university, but has 2 private universities.<sup>3</sup> The second entity, the Federation of Bosnia and Herzegovina, has 6 public universities (University of Sarajevo, University of Tuzla, University of Zenica, University of Bihać, University of Mostar, University "Džemal Bijedić" in Mostar) and 6 private universities.<sup>4</sup>

Mentioned complex state order with a large number of academic institutions, with the emergence of an epidemic caused by Severe acute respiratory syndrome coronavirus 2 – SARSCoV-2, March 2020

<sup>1</sup> Univerzitet u Banja Luci. Fakulteti. <https://www.unibl.org/sr/clanice/fakulteti>. Datum pristupa: 25. 6. 2021.

<sup>2</sup> Univerzitet u Istočnom Sarajevu. Fakulteti. <https://www.ues.rs.ba/la/fakulteti/>. Datum pristupa: 25. 6. 2021.

<sup>3</sup> Edukacija. <https://fakulteti.edukacija.rs/fakulteti-u-bosni-i-hercegovini/privatni-fakulteti-i-visoke-skole-u-bih>. Datum pristupa: 26. 6. 2021.

<sup>4</sup> Edukacija. <https://www.eduinfo.ba/privatni-fakulteti>. Datum pristupa: 26. 6. 2021.

<sup>1</sup> University of Banja Luka. Faculties. <https://www.unibl.org/en/members/faculties>. Date of access: 06/25/2021.

<sup>2</sup> University of East Sarajevo. Faculties. <https://www.ues.rs.ba/en/faculties/>. Date of access: 06/25/2021.

<sup>3</sup> Education. Available at: <https://fakulteti.edukacija.rs/fakulteti-u-bosni-i-hercegovini/privatni-fakulteti-i-visoke-skole-u-bih>. Date of access: 06/26/2021.

<sup>4</sup> Education. <https://www.eduinfo.ba/privatni-fakulteti>. Date of access: 06/26/2021.

izvanrednoj situaciji.

U skladu sa mjerama za suzbijanje širenja epidemije doneseno je niz odluka na nivou države Bosne i Hercegovine i Federacije Bosne Hercegovine<sup>5</sup> koje su dovele do zatvaranja visokoškolskih institucija i nagle tranzicije na online nastavu tokom 2020. godine. To se odnosilo i na rad biblioteka što je zahtijevalo potpuno ili djelomično reorganiziranje poslovanja biblioteka, a cilj ovoga rada je predstaviti rezultate istraživanja o radu visokoškolskih biblioteka na javnim univerzitetima u Federaciji Bosni i Hercegovini u periodu donošenja mjera oko zatvaranja visokoškolskih institucija i prelaska na online režim nastave.

## 2. Prikaz literature

Globalna pandemija prouzrokovana virusom COVID-19 donijela je brojne promjene na visokoškolskim institucijama širom svijeta. Proces nerijetko naglog prelaska na sisteme učenja na daljinu, kao rezultat djelimičnog ili potpunog zatvaranja institucija visokog obrazovanja, morale su aktivno pratiti i visokoškolske biblioteke, pomažući naučnoistraživački i obrazovni rad svih sudionika visokoškolskog obrazovanja u tim bitno promijenjenim okolnostima rada.

Rezultati prvih međunarodnih anketnih istraživanja iz 2020. godine otkrili su mnogostruke izazove i jednako tako različite prakse visokoškolskih biblioteka, ali i nacionalnih, javnih i školskih biblioteka (v. npr. National Library of the Netherlands on behalf of CDNL 2020; AASL 2020; Public Library Association 2020) u pružanju bibliotečko-informacijskih usluga u vremenu pandemije. Na promptno kreiranim posebnim mrežnim stranicama<sup>6</sup> bibliotečkih asocijacija poput IFLA-e, ALA-e, posvećenim poslovanju biblioteka u vremenu pandemije, kontinuirano su se postavljale korisne smjernice te donosile informacije o različitim aktivnostima biblioteka u pandemijskim okolnostima rada, dočim je strana literatura iz oblasti bibliotečkih i informacijskih nauka također pažnju posvetila različitim aspektima poslovanja biblioteka, donoseći i studije slučaja ili rezultate istraživanja nekog od segmenata informacijskog usluživanja na većem ili manjem uzorku biblioteka (koje djeluju u razvijenim, ali i nerazvijenim zemljama).

Kada su visokoškolske biblioteke u pitanju, pažnja se u postojećoj literaturi posvetila istraživanjima

brings new and sudden changes in the entire education sector and even in the field of librarianship and raises the issue of adaptation to this exceptional situation.

In accordance with the measures to combat the spread of the epidemic, a number of decisions were made at the level of the state of Bosnia and Herzegovina and the Federation of Bosnia and Herzegovina<sup>5</sup> which led to the closure of academic institutions and a sudden transition to online teaching during 2020. This also applied to the work of libraries, which required complete or partial reorganization of library operations, and the aim of this paper is to present the results of research on the work of academic libraries at public universities in the Federation of Bosnia and Herzegovina and teaching transition to online teaching regime.

## 2. Literature review

The global pandemic caused by the COVID-19 virus has brought many changes to academic institutions around the world. The process of often abrupt transition to distance learning systems, as a result of partial or complete closure of academic institutions, had to be actively monitored by academic libraries, helping scientific research and educational work of all participants in academic education in these significantly changed working conditions. The results of the first international survey in 2020 revealed multiple challenges and equally different practices of academic libraries, but also national, public and school libraries (See as example: National Library of the Netherlands on behalf of CDNL 2020; AASL 2020; Public Library Association 2020) in providing library and information services during the pandemic. The promptly created special web pages<sup>6</sup> of library associations such as IFLA, ALA, dedicated to the operation of libraries during the pandemic, continuously were adding useful guidelines and provided information on various activities of libraries in pandemic working conditions, while foreign literature in the field of library and information sciences also paid attention to various aspects of library operations, bringing case studies or research results of some of the segments of information services in a larger or smaller sample of libraries (operating in developed but also underdeveloped countries).

When it comes to academic libraries, the existing literature focuses on research into the provision of tra-

<sup>5</sup> "Odluka o proglašenju nastanka stanja prirodne ili druge nesreće na teritoriji Bosne i Hercegovine" *Sl. glasnik BiH* br. 18/2020, od 17. 3. 2021. <http://www.sluzbenilist.ba/page/akt/bTsBUE4N5GM>. Datum pristupa: 28. 9. 2021.

<sup>6</sup> Vidjeti: IFLA. COVID-19 and the Global Library Field. <https://www.ifla.org/covid-19-and-the-global-library-field/>. Datum pristupa: 28. 9. 2021.; ALA. "COVID-19 Recovery". <https://www.ala.org/tools/covid-19-recovery>. Datum pristupa: 25. 9. 2021.

<sup>5</sup> "The decision to declare a state of emergency for the territory of Bosnia and Herzegovina" *Sl. glasnik BiH* No. 18/2020, from 03/17/2021. <http://www.sluzbenilist.ba/page/akt/bTsBUE4N5GM>. Date of access: 09/28/2021.

<sup>6</sup> See: IFLA. COVID-19 and the Global Library Field. <https://www.ifla.org/covid-19-and-the-global-library-field/>. Date of access: 09/28/2021 ; ALA. "COVID-19 Recovery". <https://www.ala.org/tools/covid-19-recovery>. Date of access 9/25/2021

pitanja pružanja tradicionalnih i/ili digitalnih informacijskih usluga u vremenu pandemije (Guo et al. 2021), tematizirala se važna uloga biblioteka u podršci sistemima učenja na daljinu, tj. učenju i podučavanju u promijenjenom režimu nastave na visokoškolskim institucijama (Zhou 2021; Ifijeh i Yusuf 2020), donijela su se konkretna iskustva visokoškolskih bibliotekara u informacijskom usluživanju korisnika, odnosno tematizirao se utjecaj pandemije na svakodnevni rad bibliotekara/ki (Rafiq et al. 2020). Također, naglasio se značaj i proaktivne mogućnosti realizacije programa informacijske pismenosti (Guo i Huang 2021; Martzoukou 2021) u visokoškolskim bibliotekama u vremenu pandemije, pažnja se posvetila i istraživanju promjena u ponašanju korisnika u korištenju građe (Connell, Wallis i Comeaux 2021), s tim u vezi i mogućnostima otvorenog pristupa (Tavernier 2020) u pandemijskim okolnostima na visokoškolskim institucijama, čemu posebnu pažnju, pored ostalih, kontinuirano posvećuje naprimjer UNESCO, a koje su tokom pandemije prepoznali i pojedini izdavači omogućivši slobodan, nerijetko privremen pristup svojim izdanjima.<sup>7</sup>

Utjecaj pandemije na poslovanje biblioteka širom svijeta, te i dalje neizvjesne pandemijske okolnosti, ponukale su EBLIDA-u da u dokumentu *A European Library Agenda for the post-COVID-19 age* identificira pet novih "normalnosti" za period poslije COVID-a, a koje se odnose na povećanu socijalnu distancu, tehnologije, budžete biblioteka, upravljanje bibliotekama, kao i klimatske promjene (EBLIDA 2020), pri čemu potrebu za odgovarajućim djelovanjem visokoškolskih biblioteka u virtualnom prostoru i u vremenu pandemije i izradu strateških dokumenata poslije COVID-a, nerijetko mogu pratiti brojne prepreke, ali i prilike, koje rezultiraju različitim pristupima u pružanju informacijskih usluga. Tako je, primjerice, jedno od prvih realiziranih anketnih istraživanja, istraživanje LIBER-a iz decembra 2020. godine, u kojem su učestvovale i visokoškolske biblioteke (LIBER 2020), vrlo jasno ukazalo na to da ti pristupi nužno ovise o nizu faktora kao što su legislativa koja uređuje bibliotečku djelatnost, postojeća infrastruktura biblioteka, njihov budžet za nabavku građe i opreme, mogućnosti razvoja usluga i tome slično.

S tim u vezi, ovim anketnim istraživanjem nastojale su se prikupiti osnovne i nedostajuće informacije o pružanju bibliotečko-informacijskih usluga u javnim visokoškolskim bibliotekama u Federaciji Bosne i Hercegovine u vremenu pandemije, odnosno utvrditi ključni faktori koji su utjecali na načine pružanja usluga, a u aspektima pristupa biblioteč-

ditional and / or digital information services during the pandemic (Guo et al. 2021), in focus was the important role of libraries in supporting distance learning systems, i.e. learning and teaching in a changed teaching regime at academic institutions (Zhou 2021; Ifijeh and Yusuf 2020), concrete experiences of academic librarians in customer service were brought, i.e. the impact of the pandemic on the daily work of librarians (Rafiq et al. 2020). Also, the importance and possibilities of implementing information literacy programs (Guo and Huang 2021; Martzoukou 2021) in academic libraries during the pandemic were emphasized, and attention was paid to researching changes in user behaviour in the use of materials (Connell, Wallis and Comeaux 2021), in connection with the possibilities of open access (Tavernier 2020) in pandemic circumstances at academic institutions, to which special attention, among others, is continuously paid by UNESCO, which were recognized during the pandemic by some publishers allowing free, often temporary access to their editions.<sup>7</sup>

The impact of the pandemic on the operation of libraries around the world, and the still uncertain pandemic circumstances prompted EBLIDA in the document *A European Library Agenda for the post-COVID 19 age* to identify five new "normalities" for the post-covid period, relating to increased social distance, technology, library budgets, library management, and climate change (EBLIDA 2020), where the need for appropriate action of academic libraries in the virtual space and in times of pandemic and the development of "post-covid" strategic documents, can often be accompanied by numerous obstacles, but also opportunities, which result in different approaches to providing information services. Thus, for example, one of the first realized surveys, the LIBER survey from December 2020, in which higher education libraries also participated (LIBER 2020), clearly indicated that these approaches necessarily depend on a number of factors, such as legislation for governing library activities, existing library infrastructure, their budget for the accession of materials and equipment, opportunities for service development and so forth.

With this in mind, this survey sought to gather basic and missing information on the provision of library and information services in public academic libraries in the Federation of Bosnia and Herzegovina during the pandemic, i.e. to identify key factors that influenced the ways of providing services, and in aspects of access to library collections and resources and library premises, further, the aspects of providing information services to users, and other work related processes in academic libraries.

<sup>7</sup> Vidjeti: UNESCO. "Open access to facilitate research and information on COVID-19". <https://en.unesco.org/covid19/communicationresponse/opensolutions>. Datum pristupa: 29. 9. 2021.

<sup>7</sup> See: UNESCO. "Open access to facilitate research and information on COVID-19". <https://en.unesco.org/covid19/communicationresponse/opensolutions>. Date of access: 09/29/2021.

kim zbirka i izvorima te prostorijama biblioteke, zatim aspektima pružanja informacijskih usluga korisnicima, te drugih povezanih radnih procesa u visokoškolskim bibliotekama.

### 3. Metode i istraživački korpus

U istraživanju informacijskih usluga javnih visokoškolskih biblioteka Federacije Bosne i Hercegovine za vrijeme pandemije COVID-19 korištena je metoda ankete, za čiju se provedbu koristio mrežni anketni upitnik sastavljen od 25 pitanja, od kojih su 24 pitanja zatvorenog tipa i jedno pitanje otvorenog tipa. Anketa je upućena na e-mail adrese bibliotekara 47 visokoškolskih biblioteka javnih univerziteta, samo onih visokoškolskih biblioteka koje imaju kontakt (e-mail) na web stranici fakulteta / akademije / univerziteta, u junu 2021. godine. Istraživanjem su obuhvaćene samo visokoškolske biblioteke javnih univerziteta u Federaciji Bosne i Hercegovine.

### 4. Rezultati istraživanja

Cilj ovoga istraživanja je utvrditi kako su javne visokoškolske biblioteke u Federaciji Bosne i Hercegovine prilagodile i/ili redefinirale svoje bibliotečko-informacijske usluge pandemijskim okolnostima rada, metodom u ovu svrhu posebno kreirane ankete koja se sastojala od nekoliko kategorija:

- bibliotečke zbirke i izvori (pristup građi i prostorijama biblioteke, digitalne zbirke, drugi izvori informacija),
- pružanje informacijskih usluga korisnicima (najzastupljeniji zadaci bibliotekara/ki u pružanju tradicionalnih i digitalnih informacijskih usluga, komunikacija s korisnicima),
- drugi radni procesi u visokoškolskim bibliotekama (saradnja biblioteka, aktivnosti biblioteka u vremenu pandemije).

U ispunjavanju online ankete, koje je upućena na adrese 47 javnih visokoškolskih biblioteka, ukupno je učestvovalo 26 bibliotekara/ki (stopa odgovora od 55,3%), i to 92,3% ispitanica ženskog, a 7,7% ispitanika muškog spola, od kojih 50% anketiranih bibliotekara/ki ima 10 do 20 godina iskustva rada u bibliotekama, 7,7% njih radi 5 do 10 godina u bibliotekama, 7,7% ispitanika/ca ima više od 30 godina iskustva rada u bibliotekama, 15,4% ispitanika/ca radi u bibliotekama od 20 do 30 godina, a 19,2% ispitanika/ca ima iskustvo rada do 5 godina u bibliotekama.

Većina ispitanika/ca ima stručno zvanje bibliotekara/ke (61,5%), 19,2% ispitanika/ca ima stručno zvanje višeg/e bibliotekara/ke, 11,5% ispitanika/ca stručno zvanje knjižničara/ke, dok 7,7% ima stručno zvanje bibliotečkog/e savjetnika/ce.

### 3. Methods and corpus-based research

In the research of information services of public academic libraries of the Federation of Bosnia and Herzegovina during the COVID-19 pandemic, a survey method was used, for the implementation of which an online survey questionnaire consisting of 25 questions was used, of which 24 were closed questions and one was open question. The survey was sent in June 2021 to the e-mail addresses of librarians of 47 academic libraries of public universities, only to those academic libraries that have contact (e-mail) on the website of the faculty / academy / university. The research covered only academic libraries of public universities in the Federation of Bosnia and Herzegovina.

### 4. Research results

The aim of this research is to determine how public academic libraries in the Federation of Bosnia and Herzegovina have adapted and / or redefined their library and information services to pandemic working conditions, with the method, for this purpose specially created survey that consisted of several categories:

- library collections and sources (access to library materials and premises, digital collections, other sources of information),
- providing information services to users (the most common tasks of librarians in providing traditional and digital information services, communication with users),
- other work processes in academic libraries (library cooperation, library activities during the pandemic).

In online survey completion, which was sent to the addresses of 47 public academic libraries, a total of 26 librarians participated (response rate of 55.3%), as follows: 92.3% of female subjects, and 7.7% of male subjects, of which 50% of the surveyed librarians have 10 to 20 years of experience in libraries, 7.7% of them work 5 to 10 years in libraries, 7.7% of subjects have more than 30 years of experience working in libraries, 15.4% of subjects work in libraries from 20 to 30 years, and 19.2% of subjects have experience working up to 5 years in libraries.

The majority of subjects have the professional title of librarian (61.5%), 19.2% of subjects have the professional title of senior librarian, 11.5% of subjects have the professional title of library technician, while 7.7% have the professional title of library advisor.

During the pandemic, half of the subjects who took part in the survey performed their professional duties in the library premises, while the other half performed their professional duties in combination, working from home and in the library premises.

Tokom pandemije, polovina ispitanika/ca koji su učestvovali u popunjavanju ankete obavljala je svoje profesionalne dužnosti u prostorijama biblioteke, dok je druga polovina obavljala svoje profesionalne dužnosti kombinovano, radeći od kuće i u prostorijama biblioteke.

#### 4.1. Bibliotečke zbirke i izvori

Istraživanjem obuhvaćene visokoškolske biblioteke, informacijske usluge od početka pandemije pružale su u skladu sa naredbama i preporukama kriznih štabova na nivou kantona i preporuka menadžmenta, kao i u skladu s naredbama Kriznog štaba na nivou Federacije BiH (Tablica 1), a informacije o nastalim promjenama u poslovanju biblioteka, odnosno pružanju informacijskih usluga, biblioteke su najviše prenosile putem e-maila (57,7%), putem mrežne stranice fakulteta (53,8%), veliki procenat biblioteka na web oglasnim pločama biblioteke / fakulteta / akademije / univerziteta (50%), te nešto manji broj i u lokalnim medijima (11,5%).

**Tablica 1: Pružanje informacijskih usluga u vremenu pandemije**

<i>Koje naredbe / preporuke / smjernice usvajate u pružanju informacijskih usluga u vremenu pandemije (moguće je označiti više odgovora)?</i>	
Naredbe / Preporuke Kriznog štaba na nivou FBIH	<b>19 (73,1%)</b>
Naredbe / Preporuke Kriznog štaba na nivou Kantona	<b>22 (84,6%)</b>
Naredbe / Preporuke menadžmenta	<b>22 (84,6%)</b>
Interne pravilnike i procedure	<b>12 (46,2%)</b>
Smjernice IFLA-e i drugih međunarodnih ustanova	<b>10 (38,5%)</b>

U julu 2021. godine, kada je realizirano anketno istraživanje, korisnici<sup>8</sup> 22 biblioteke na koje se istraživanje odnosi mogli su neometano koristiti prostorije biblioteke, u skladu s epidemiološkim mjerama zaštite, dok 4 biblioteke još uvijek nisu bile otvorene za javnost jer u tim bibliotekama nisu postojali osnovni uslovi za poštivanje propisanih epidemioloških mjera zaštite i prevencije.

U većini biblioteka (84,6%) posudba štampane građe vršila se u skladu s epidemiološkim mjerama zaštite, pri čemu je u 20 biblioteka (76,9%) produženo vrijeme posudbe građe, čak 80,8% biblioteka je omogućilo rezervaciju građe putem telefona, a 2 biblioteke su omogućavale dostavu građe i putem pošte (Tablica 2).

#### 4.1. Library collections and sources

The academic libraries covered by research provided information services from the beginning of the pandemic in accordance with the orders and recommendations of the Crisis Headquarters at the cantonal and management recommendations level, as well as in accordance with the orders of the Crisis Headquarter at the Federation level (Table 1) and information about changes in the library operations, i.e. the provision of information services, libraries mostly informed via e-mail (57.7%), via the faculty website (53.8%), a large percentage of libraries on the web noticeboards of the library / faculty / academy / university (50%), and a slightly smaller number in the local media (11.5%).

**Table 1: Providing information services during a pandemic**

<i>What orders / recommendations / guidelines do you adopt in providing information services during a pandemic (multiple responses can be marked)?</i>	
Orders / Recommendations of the Crisis Headquarter at the FBIH level	<b>19 (73.1%)</b>
Orders / Recommendations of the Crisis Headquarter at the Cantonal level	<b>22 (84.6%)</b>
Orders / Management recommendations	<b>22 (84.6%)</b>
Internal policies and procedures	<b>12 (46.2%)</b>
IFLA guidelines and other international institutions	<b>10 (38.5%)</b>

In July 2021, when the survey was conducted, users<sup>8</sup> of 22 libraries covered by the survey were able to use the library premises unimpeded, in accordance with epidemiological protection measures, while 4 libraries were still not open to the public because in those libraries the basic conditions for compliance with prescribed epidemiological protection and prevention measures did not exist.

In most libraries (84.6%) loan of printed material was carried out in accordance with epidemiological protection measures, while in 20 libraries (76.9%) the time of material loan was extended, as many as 80.8% of libraries enabled the reservation of material by telephone, and 2 libraries enabled the delivery of materials by mail (Table 2).

**Table 2: Loan of printed materials**

<i>From the beginning of the pandemic, was the loan of printed materials in your library executed with some additional benefits for library users (multiple answers can be marked)?</i>	
The time for material loan has been extended	<b>20 (76.9%)</b>
There is a possibility of online reservation of materials	<b>14 (53.8%)</b>
It is possible to reserve the material by phone	<b>21 (80.8%)</b>
Delivery of materials by mail is possible	<b>2 (7.7%)</b>
None of the above	<b>0 (0%)</b>

<sup>8</sup> Većina istraživanjem obuhvaćenih visokoškolskih biblioteka (53,8%), opslužuje manji broj korisnika, do 1000 korisnika, 7,7% biblioteka opslužuje 2000–3000 korisnika, 15,4% opslužuje više od 3000 korisnika, dok druge opslužuju 1000–2000 korisnika (23,1%).

<sup>8</sup> The majority of academic libraries covered by the research (53.8%) serve a smaller number of users, up to 1000 users, 7.7% of libraries serve 2000–3000 users, 15.4% serve more than 3000 users, while others serve 1000–2000 users (23.1%).

Tablica 2: Posudba štampane građe

<i>Da li se od početka pandemije posudba štampane građe u Vašoj biblioteci vrši s nekim dodatnim pogodnostima za korisnike/ce biblioteke (moguće je označiti više odgovora)?</i>	
Produženo je vrijeme posudbe građe	20 (76,9%)
Postoji mogućnost online rezervacije građe	14 (53,8%)
Moguće je građu rezervirati telefonskim putem	21 (80,8%)
Moguća je dostava građe putem pošte	2 (7,7%)
Ništa od navedenog	0 (0%)

Većina anketiranih visokoškolskih bibliotekara/ki na službenim mrežnim stranicama upućuje na online katalog biblioteke, zatim baze podataka na koje je biblioteka pretplaćena, uslugu *Pitajte bibliotekara*, te korisne linkove. Manji broj bibliotekara/ki na svojim mrežnim stranicama upućuje na digitalne zbirke, FAQ i druge izvore informacija (Tablica 3).

Tablica 3: Izvori na mrežnim stranicama biblioteka

<i>Na koje izvore upućujete na mrežnoj stranici biblioteke ili fakulteta / akademije / univerziteta (moguće je označiti više odgovora)?</i>	
Online katalog biblioteke	19 (73,1%)
Uslugu <i>Pitajte bibliotekara</i>	12 (46,2%)
Digitalne zbirke	3 (11,5%)
Baze podataka	15 (57,7%)
Direktorije / portale / repozitorije i sl. u otvorenom pristupu	6 (23,2%)
Bibliografije	4 (15,4%)
Korisne informacije o COVID-u	5 (19,2%)
Alate za upravljanje bibliografskim referencama	1 (3,8%)
Korisne linkove	9 (34,6%)
Bazu podataka često postavljenih pitanja korisnika	2 (7,7%)
Katalog prinova	5 (19,2%)
Najčitanije naslove	2 (7,7%)
Ništa od navedenog	2 (7,7%)

Kada je u pitanju pristup bazama podataka koji ove biblioteke omogućavaju, najveći broj biblioteka, njih 16 (61,5%), pretplaćene su na EBSCO host, 10 biblioteka (38,5%) na WoS, 5 biblioteka (19,2%) na ScienceDirect, 7 (26,9%) na Scopus, te je 6 biblioteka navelo da je pretplaćeno na druge specijalizirane baze podataka, a 7 biblioteka (26,9%) nije pretplaćeno niti na jednu od spomenutih baza podataka (ili drugih specijaliziranih).

#### 4.2. Pružanje informacijskih usluga korisnicima

Od početka pandemije, većina ispitanika/ca je navela kako su sa svojim korisnicima komunicirali ponajviše putem e-maila (96,2%) i telefona (84,6%), manji broj bibliotekara/ki komunicirao je sa korisnicima putem društvenih mreža (15,4%), još manji broj preko live chata (7,7%) ili videopoziva (3,8%), dok je 53,8% bibliotekara/ki imalo direktan kontakt sa korisnicima biblioteke.

Kao najzastupljenije profesionalne obaveze bibliotekara/ki u vremenu pandemije, a u komunikaciji sa studentima, većina bibliotekara/ki je izdvojila

Most of the surveyed academic librarians on the official website refer to the library online catalogue, then the databases to which the library is subscribed, the service Ask a librarian, and useful links. A small number of librarians refer to digital collections, FAQs and other sources of information on their websites (Table 3).

Table 3: Resources on library websites

<i>To what sources on the website of the library or faculty / academy / university do you refer to (multiple answers can be marked)?</i>	
Library online catalogue	19 (73.1%)
The service Ask a librarian	12 (46.2%)
Digital collections	3 (11.5%)
Databases	15 (57.7%)
Directories / portals / repositories, etc. in open access	6 (23.2%)
Bibliographies	4 (15.4%)
Useful information about COVID	5 (19.2%)
Bibliographic citation management tools	1 (3.8%)
Useful links	9 (34.6%)
A database of frequently asked user questions	2 (7.7%)
Accessions catalogue	5 (19.2%)
The most read titles	2 (7.7%)
None of the above	2 (7.7%)

When it comes to access to databases that these libraries provide, the largest number of libraries, 16 of them (61.5%) are subscribed to EBSCO host, 10 libraries (38.5%) to WoS, 5 libraries (19.2%) to ScienceDirect, 7 (26.9%) to Scopus, and 6 libraries stated that they subscribed to other specialized databases, and 7 libraries (26.9%) did not subscribe to any of the mentioned databases (or to other specialized ones).

#### 4.2. Providing information services to customers

Since the beginning of the pandemic, the majority of subjects stated that they communicated with their users mostly via e-mail (96.2%) and telephone (84.6%), a smaller number of librarians communicated with users via social networks (15.4%), even smaller number via live chat (7.7%) or video calls (3.8%), while 53.8% of librarians had direct contact with library users.

As the most common professional obligations of librarians during the pandemic, and in communication with students, most librarians singled out the loan of printed materials (96.2%), then assistance in searching the online catalogue of the library (69.2%), resolving inquiries of the service Ask a librarian and referrals to open educational content (46.2%), as well as assistance in organizing bibliographic references (34.6%), least of all, e.g., communication with students via live chat or web streaming, as shown in Table 4.

posudbu štampane građe (96,2%), zatim pomoć pri pretraživanju online kataloga biblioteke (69,2%), rješavanje upita usluge *Pitajte bibliotekara* i upućivanje na otvorene obrazovne sadržaje (46,2%), kao i pomoć pri organizaciji bibliografskih referenci (34,6%), a ponajmanje, naprimjer, komunikaciju sa studentima putem live chata ili web streaminga, kao što je vidljivo na Tablici 4 ispod.

**Tablica 4: Radni zadaci bibliotekara/ki u vremenu pandemije**

<b>Označite svoje radne zadatke u komunikaciji sa studentima/cama u vremenu pandemije (moguće je označiti više odgovora):</b>	
Pomoć pri pretraživanju online kataloga	18 (69,2%)
Pomoć pri pretraživanju baza podataka	15 (57,7 %)
Pomoć pri pretraživanju interneta	7 (26,9%)
Pomoć pri organizaciji bibliografskih referenci	9 (34,6%)
Digitalizacija na zahtjev	5 (19,2%)
Posudba štampane građe	25 (96,2%)
Posudba digitalne građe	6 (23,1%)
Rješavanje upita usluge <i>Pitajte bibliotekara</i>	12 (46,2%)
Pomoć pri korištenju alata za videokonferencije	1 (3,8%)
Komunikacija sa studentima putem live chata	1 (3,8%)
Web streaming za različite potrebe	1 (3,8%)
Upućivanje na otvorene obrazovne materijale	12 (46,2%)
Pomoć pri korištenju sistema učenja na daljinu	2 (7,7%)

S druge strane, kao najčešće obaveze u komunikaciji sa nastavnim osobljem, bibliotekari/ke su također izdvojili posudbu štampane građe (96,2%), zatim pomoć pri pretraživanju online kataloga (65,4%), pomoć pri pretraživanju baza podataka (61,5%), skeniranje na zahtjev (57,7%), pomoć pri organiziranju online nastave (34,6%), pri čemu niti jedan bibliotekar/ka nisu pružali pomoć nastavnom osoblju u kreiranju objekata učenja za sisteme učenja na daljinu.

Kada su online programi edukacije za korištenje usluga biblioteka u pitanju, tokom pandemije 16 biblioteka (61,5%) nije realiziralo te programe, preostalih 10 (38,5%) je realiziralo na zahtjev korisnika, a dvije biblioteke (7,7%) po unaprijed utvrđenom rasporedu.

Usto, 18 biblioteka, nije realiziralo online programe informacijske pismenosti, samo jedna biblioteka je takvo što radila prema unaprijed utvrđenom rasporedu, a preostale na zahtjev korisnika/ce (Tablica 5).

**Tablica 5: Online programi informacijske pismenosti**

<b>Da li od početka pandemije održavate online programe informacijske pismenosti?</b>	
Da, na zahtjev korisnika/ce	7 (28%)
Da, po unaprijed utvrđenom rasporedu	1 (4%)
Ne, biblioteka nije u mogućnosti da takvo što realizira	18 (72%)

Također, u pogledu održavanja drugih oblika online aktivnosti biblioteka, svega 5 biblioteka (19,2%) je tokom pandemije organiziralo online promocije knjiga i druge web streaminge, 4 biblioteke (15,4%)

**Table 4: Librarian work assignments during a pandemic**

<b>Mark your work assignments in communication with students during the pandemic (multiple answers are possible):</b>	
Assistance in searching the online catalogue	18 (69.2%)
Assistance in searching the databases	15 (57.7 %)
Assistance in searching the Internet	7 (26.9%)
Assistance in organizing bibliographic references	9 (34.6%)
Digitization on demand	5 (19.2%)
Loan of printed materials	25 (96.2%)
Loan of digitized materials	6 (23.1%)
Resolving inquiries of the service Ask a librarian	12 (46.2%)
Help with using video conferencing tools	1 (3.8%)
Communication with students via live chat	1 (3.8%)
Web streaming for different needs	1 (3.8%)
Referrals to open educational content	12 (46.2%)
Assistance in using the distance learning system	2 (7.7%)

On the other hand, as the most common obligations in communication with teaching staff, librarians also singled out the loan of printed materials (96.2%), then assistance in searching online catalogues (65.4%), assistance in searching databases (61.5%), on-demand scanning (57.7%), assistance in organizing online classes (34.6%), where no librarian has assisted the teaching staff in creating learning objects for distance learning systems.

When it comes to online education programs for the use of library services, during the pandemic 16 libraries (61.5%) did not implement these programs, the remaining 10 (38.5%) implemented at the request of users, and 2 libraries (7.7%) according to a predetermined schedule. In addition, 18 libraries did not implement online information literacy programs, only one library did so according to a predetermined schedule, and the rest at the request of users (Table 5).

**Table 5: Online information literacy programs**

<b>Have you maintained online information literacy programs since the beginning of the pandemic?</b>	
Yes, at the request of the user	7 (28%)
Yes, according to a predetermined schedule	1 (4%)
No, the library is not able to implement a thing like that	18 (72%)

Also, in terms of maintaining other forms of online library activities, only 5 libraries (19.2%) organized online book promotions and other web streamings during the pandemic, 4 libraries (15.4%) organized webinars, and three libraries (11.5%) online exhibitions. 18 surveyed librarians (69.2%) did not organize any of the mentioned online activities.

As the main obstacles that affect the provision of information services in the research covered by academic libraries, the majority of subjects (76.9%) singled out the lack of IT equipment for librarians to work from home and / or library premises, then insufficient library budget for materials and IT equipment (69.2%), as well as underdeveloped digital



su organizirale webinare, a tri biblioteke (11,5%) online izložbe. Od ukupnog broja, 18 anketiranih bibliotekara/ki (69,2%) nije organiziralo niti jednu od spomenutih online aktivnosti.

Kao temeljne prepreke koje utiču na pružanje informacijskih usluga u istraživanjem obuhvaćenim visokoškolskim bibliotekama, većina ispitanika/ca (76,9%) je izdvojila nedostatak IT opreme za rad bibliotekara od kuće i/ili prostorija biblioteke, zatim nedovoljan budžet biblioteke za nabavku građe i IT opreme (69,2%), kao i nedovoljno razvijene digitalne informacijske usluge (65,4%) te ograničen broj pretplata na baze podataka (50%).

Pored spomenutog, kao prepreke, izdvojeni su i legislativa neprilagođena digitalnom dobu (53,8%) i Zakon o autorskim i srodnim pravima BiH (46,2%). Također, manji broj ispitanika/ca je kao prepreke u pružanju informacijskih usluga naveo i nedovoljno razvijene kompetencije bibliotekara (19,2%) te manjak bibliotečkog kadra (26,9%).

Većina anketiranih bibliotekara/ki (92,3%), složno je u tome da je pandemija naglasila najprije potrebu digitalne transformacije biblioteka. Također, bibliotekari/ke su mišljenja da je pandemija ponukala i uvođenje novih digitalnih informacijskih usluga u biblioteke, novih oblika edukacije korisnika/ca, nadalje je poboljšala promociju biblioteka u web prostoru i naglasila značaj cjeloživotnog učenja bibliotekara/ki (Tablica 6).

**Tablica 6: Učinci pandemije na pružanje informacijskih usluga**

<i>Kakvi su po Vašem mišljenju učinci pandemije na pružanje informacijskih usluga u Vašoj biblioteci (moguće je označiti više odgovora)?</i>	
Pandemija je utjecala na uvođenje novih digitalnih informacijskih usluga (npr. web streaming, live chat i sl.)	<b>11 (42,3%)</b>
Pandemija je naglasila potrebu za digitalnom transformacijom biblioteke	<b>24 (92,3%)</b>
Pandemija je utjecala na uvođenje novih oblika edukacije korisnika/ca	<b>13 (50%)</b>
Poboljšana je saradnja s drugim ustanovama	<b>7 (26,9%)</b>
Poboljšana je međubibliotečka pozajmica	<b>5 (19,2%)</b>
Revidirani su strateški dokumenti biblioteka (npr. krizni plan)	<b>3 (11,5%)</b>
Biblioteka je započela određene projekte	<b>5 (19,2%)</b>
Bibliotekari/ke su stekli/e nove kompetencije	<b>9 (34,6%)</b>
Poboljšala se mrežna stranica biblioteke	<b>4 (15,4%)</b>
Prisustvo biblioteke na društvenim mrežama se povećalo	<b>7 (26,9%)</b>
Poboljšala se promocija biblioteka u web prostoru	<b>11 (42,3%)</b>

#### 4.3. Drugi radni procesi u visokoškolskim bibliotekama

Tablica 7, koja donosi pregled tipova saradnje koja je uspostavljena u istraživanjem obuhvaćenim bibliotekama tokom pandemije, pokazuje da je većina

information services (65.4%) and a limited number of subscriptions to databases (50%). In addition to the above, the non-adapted legislation to the digital age (53.8%) and the Copyright and Related Rights Law (46.2%) were singled out as obstacles. Also, a smaller number of subjects specified insufficiently developed competencies of librarians (19.2%) and a lack of library staff (26.9%) as obstacles in providing information services.

The majority of librarians surveyed (92.3%) agree that the pandemic first emphasized the need for digital transformation of libraries. Also, librarians are of the opinion that the pandemic offered the introduction of new digital information services in libraries, new forms of user education, further it has improved the promotion of libraries in the web space and emphasized the importance of lifelong learning of librarians. (Table 6).

**Table 6: The effects of the pandemic on the provision of information services**

<i>What do you think are the effects of the pandemic on the provision of information services in your library (multiple answers can be marked)?</i>	
The pandemic has affected the introduction of new digital information services (e.g. web streaming, live chat, etc.)	<b>11 (42.3%)</b>
The pandemic highlighted the need for a digital transformation of the library	<b>24 (92.3%)</b>
The pandemic has influenced the introduction of new forms of user education	<b>13 (50%)</b>
Cooperation with other institutions has improved	<b>7 (26.9%)</b>
Interlibrary loan has been improved	<b>5 (19.2%)</b>
Library strategic documents have been revised (e.g. crisis plan)	<b>3 (11.5%)</b>
The library has started certain projects	<b>5 (19.2%)</b>
Librarians have acquired new competencies	<b>9 (34.6%)</b>
The library's website has improved	<b>4 (15.4%)</b>
The presence of the library on social networks has increased	<b>7 (26.9%)</b>
The promotion of libraries in the web space has improved	<b>11 (42.3%)</b>

#### 4.3. Other work processes in academic libraries

Table 7, which provides an overview of the types of cooperation established in the research covered libraries during the pandemic, shows that the majority of librarians (57.7%) cooperated with other libraries and / or institutions during the pandemic, mainly for interlibrary loan and exchange of experiences, then the organization of online events (53.8), and that a small number of subjects (11.5%) did not cooperate with other libraries at all, in any of these segments.

bibliotekara/ki (57,7%) tokom pandemije saradivala sa drugim bibliotekama i/ili ustanovama ponajviše zbog međubibliotečke pozajmice i razmjene iskustava, zatim organizacije online događaja (53,8), te da manji broj ispitanika/ca (11,5%) uopće nije saradivao sa drugim bibliotekama, niti u jednom od navedenih segmenata.

**Tablica 7: Saradnja bibliotekara tokom pandemije**

<i>Od početka pandemije saradujete sa drugim bibliotekama i/ili ustanovama zbog (moguće je označiti više odgovora):</i>	
Međubibliotečke pozajmice	<b>15 (57,7%)</b>
Razmjene iskustava	<b>15 (57,7%)</b>
Digitalizacije na zahtjev (u skladu sa važećim Zakonom o autorskom pravu i srodnim pravima u BiH)	<b>7 (26,9%)</b>
Organizacije online događaja / susreta	<b>14 (53,8%)</b>
Ništa od navedenog	<b>3 (11,5%)</b>

Također, od početka pandemije 61,5% anketiranih bibliotekara/ki je navelo da je prisustvovalo radionicama i treninzima posvećenim poslovanju biblioteka u vremenu pandemije, konferencijama i okruglim stolovima prisustvovalo je 34,6% ispitanika/ca, dok 26,9% ispitanika/ca nije prisustvovalo spomenutim događajima, niti čak redovitim sastancima sa menadžmentom ustanove na kojima bi se tematiziralo poslovanje biblioteka u pandemijskim okolnostima.

## 5. Diskusija

Visokoškolske biblioteke su za vrijeme pandemije osigurale tradicionalne bibliotečke usluge za korisnike, poput posudbe građe, međubibliotečke pozajmice, obrade građe i referentnih usluga. Pri tome je veliki broj biblioteka (76,9%) produžio vrijeme posudbe, te su se općenito poboljšale usluge vezane za korisničke zahtjeve za štampanom građom, pri čemu je reakcija na nove okolnosti izazvane pandemijom bila blagovremena i kontinuirana, čak i za vrijeme rada "iza zatvorenih vrata".

S druge strane, stanje hitnosti uzrokovano pandemijom učinilo je evidentnim odranije vidljive probleme prisutne u visokoškolskim bibliotekama, poput primjerice stalnog nedostatka finansiranja i posljednjeg nedostatka resursa, naglašenu potrebu za potraživanjem sredstava izvan institucije, kompleksnost legislative koja se odnosi na djelovanje biblioteka, uključujući djelovanje u kriznim situacijama.

Naime, više od 90% anketiranih bibliotekara/ki dijeli svijest o potrebi prilagođavanja visokoškolskih biblioteka digitalnom dobu, a što, u vrijeme iznenadne tranzicije na online okruženje učenja i podučavanja, ističe potrebu prilagođavanja modelu učenja digitalnog doba, gdje su od velikog značaja izvori i usluge digitalnih biblioteka. U vezi s osiguravanjem pristupa udaljenim ili mjesno dostupnim

**Table 7: Librarians' cooperation during a pandemic**

<i>Since the beginning of the pandemic, you have been cooperating with other libraries and / or institutions due to (it is possible to mark more than one answer):</i>	
Interlibrary loan	<b>15 (57.7%)</b>
Exchange of experiences	<b>15 (57.7%)</b>
Digitization on demand (in accordance with the current Copyright and Related Rights Law in BiH)	<b>7 (26.9%)</b>
Organization of online events / meetings	<b>14 (53.8%)</b>
None of the above	<b>3 (11.5%)</b>

Also, since the beginning of the pandemic, 61.5% of the surveyed librarians stated that they attended workshops and trainings dedicated to library operations during the pandemic, conferences and round tables were attended by 34.6% of subjects, while 26.9% of subjects did not attend the mentioned events, or even regular meetings with the management of the institution at which the topic of library operations in pandemic circumstances would be discussed.

## 5. Discussion

Academic libraries provided traditional library services to users during the pandemic, such as material loan, interlibrary loan, material processing, and reference services. At the same time, a large number of libraries (76.9%) extended the time of loan, and services related to user requests for printed materials generally improved, where the response to new circumstances caused by the pandemic was prompt and continuous, even during operation "Behind closed doors." On the other hand, the state of emergency caused by the pandemic has made evident the previously visible problems present in academic libraries, such as the persistent lack of funding and consequent lack of resources, the pronounced need to seek funding outside the institution, the complexity of library legislation, including acting in crisis situations.

In fact, more than 90% of surveyed librarians share awareness of the need to adapt academic libraries to the digital age, which, at a time of sudden transition to an online learning and teaching environment, emphasizes the need to adapt to the digital age learning model, where the resources and services of digital libraries are of great importance. Regarding the provision of access to remote or locally available sources of information, there is a lack of infrastructure and equipment for access to sources, as indicated by the percentage of libraries that provide access to digital collections (11.5%), in parallel to the data on digital material loan (23.1%) at the time of the pandemic. However, librarians reduce the lack of infrastructure by organizing services such as digitization on demand (19.2%) or managing collections of useful links (34.6%), and by referring to directories, portals, repositories, etc. in open access (23.2%).

izvorima informacija, evidentan je nedostatak infrastrukture i opreme za pristup izvorima, na što ukazuje podatak o procentu biblioteka koje omogućavaju pristup digitalnim zbirkama (11,5%), usporedo sa podatkom o posudbi digitalne građe (23,1%) u vrijeme pandemije. Ipak, bibliotekari umanjuju nedostatak infrastrukture organiziranjem usluga poput digitalizacije na zahtjev (19,2%) ili upravljanjem zbirkama korisnih linkova (34,6%), te upućivanjem na direktorije, portale, repozitorije i sl. u otvorenom pristupu (23,2%).

Nedostajuća infrastruktura utjecala je nepovoljno i na održavanje online programa edukacije (61,5%) i online programa informacijske pismenosti u većini biblioteka (72%) na koje se odnosi istraživanje, kao i na održavanje drugih online događaja u bibliotekama (69,2%), dok se komunikacija sa korisnicima odvijala najviše putem e-maila (96,2%), a najmanje putem live chata (7,7%) ili videopoziva (3,8%).

U smislu podrške naučnom radu i nastavi unutar kampusa, četvrtina anketiranih bibliotekara/ki realizira digitalizaciju na zahtjev, što čini 57,7% saradnje sa nastavnim osobljem u vremenu pandemije, dok manji procenat biblioteka nudi podršku nastavnicima u održavanju online nastave. Kada je riječ o komunikaciji sa nastavnim osobljem i studentima, izraženo dominira korištenje štampane građe, što je naglasilo potrebu za stavljanjem dijela zbirki u digitalni oblik, prvenstveno izgradnjom univerzitetskih (i fakultetskih) repozitorija ocjenskih radova, bogaćenjem zbirki udaljenih izvora informacija novim pretplatama i novim poveznicama na otvorene izvore, te daljom optimizacijom infrastrukture radi jednostavnije prilagodbe kriznim situacijama.

Također, online obrazac za vrednovanje informacijskih usluga od strane korisnika imale su samo dvije biblioteke (7,7%), kod 4 biblioteke ovi obrasci su bili u procesu izrade, a čak 20 biblioteka (76,9%) nije imalo takav obrazac, niti se u tim bibliotekama on planirao uvesti. U tom smislu, a zbog cjelovitijeg uvida u prepreke i prilike informacijskog usluživanja korisnika u visokoškolskim bibliotekama u Federaciji Bosne i Hercegovine tokom pandemije, bilo bi korisno dopuniti ovo istraživanje istraživanjem percepcije korisnika visokoškolskih biblioteka o pruženim informacijskim uslugama.

## 6. Zaključak

Anketno istraživanje o informacijskim uslugama javnih visokoškolskih biblioteka u Federaciji Bosne i Hercegovine otkrilo je neke prepreke u pružanju bibliotečko-informacijskih usluga u ovim bibliotekama u vremenu pandemije. Kako otkrivaju rezultati istraživanja, pored zastarjele legislative koja uređuje bibliotečku djelatnost (kao i druge srodne legislative), u aspektu bibliotečkih zbirki i izvora,

The lack of infrastructure also adversely affected the maintenance of online education programs (61.5%) and online information literacy programs in most libraries (72%) covered by the research, as well as the maintenance of other online events in libraries (69.2%), while communication with users took place mostly via e-mail (96.2%) and least via live chat (7.7%) or video call (3.8%).

In terms of support for on-campus research and teaching, a quarter of librarians surveyed implement on-demand digitization, which makes 57.7% of cooperation with faculty staff during the pandemic, while a smaller percentage of libraries offer support to teachers in online teaching. When it comes to communication with teaching staff and students, the use of printed materials clearly dominates, which emphasized the need to add part of the collections in digital form, primarily by building university (and faculty) repositories of assessment papers, enriching collections of remote information sources with new subscriptions and new links to open sources, and further with optimization of infrastructure for easier adaptation to crisis situations.

Also, only two libraries (7.7%) had an online form for evaluating information services by users, in 4 libraries these forms were in the process of being developed, and as many as 20 libraries (76.9%) did not have such form, nor it was planned to be introduced in those libraries. In that sense, and for a more complete insight into the obstacles and opportunities of information service for users in academic libraries in the Federation of Bosnia and Herzegovina during the pandemic, it would be useful to supplement this research with research on the perception of academic library users about provided information services.

## 6. Conclusion

A survey on information services of public academic libraries in the Federation of Bosnia and Herzegovina revealed some obstacles to the provision of library and information services in these libraries during the pandemic. As the results of the research reveal, in addition to outdated legislation that governs library activities (as well as other related legislation), in terms of library collections and sources, libraries covered by the research are characterized, in first, with lack of basic and appropriate IT equipment in most libraries, insufficient budget for continuous accession, including funds for subscriptions to journals or databases, or the development of digital collections, confirming that regular funding and investment of additional funds in these academic libraries is needed.

Given the numerous mentioned legal, technological and in some places staff limitations, digital information services are insufficiently developed in most

istraživanjem obuhvaćene biblioteke karakteriziraju, najprije, nedostatak osnovne i odgovarajuće IT opreme u većini biblioteka, nedovoljan budžet za kontinuiranu nabavku građe, uključujući sredstva za pretplate na časopise ili baze podataka, odnosno razvoj digitalnih zbirki, potvrđujući da je neophodno redovno finansiranje i ulaganje dodatnih sredstava u ovim visokoškolskim bibliotekama.

S obzirom na brojna spomenuta pravna, tehnološka i ponegdje kadrovska ograničenja, kod većine biblioteka na koje se odnosi istraživanje nedovoljno su razvijene digitalne informacijske usluge. Ipak, u aspektu pružanja informacijskih usluga korisnicima, svi anketirani visokoškolski bibliotekari nastojali su osigurati tradicionalne informacijske usluge za korisnike, a pojedine biblioteke su napravile iskorak ka realizaciji online programa edukacije i novih oblika komunikacije s korisnicima.

Kada je riječ o drugim radnim procesima u visokoškolskim bibliotekama u vrijeme pandemije u Federaciji Bosne i Hercegovine, rezultati istraživanja pokazuju da se poboljšala međusobna saradnja većine anketiranih biblioteka u smislu međubibliotečke pozajmice i razmjene iskustava, ali i to da je pandemija pozitivno utjecala na njihovu promociju u web prostoru i prisustvo na društvenim mrežama.

Pandemija prouzrokovana virusom COVID-19 osvijestila je potrebu za stalnim stručnim usavršavanjem visokoškolskih bibliotekara/ki, naglasila značaj strateškog planiranja u visokoškolskim bibliotekama, potrebu za tijesnom saradnjom između bibliotekara i svih sudionika visokoškolskog obrazovanja, a istraživanje o bibliotečko-informacijskim uslugama u javnim visokoškolskim bibliotekama Federacije Bosne i Hercegovine potvrđuje da se kao rezultat pandemijskih okolnosti naglasila potreba za hitnom digitalnom transformacijom ovih javnih ustanova.

of the libraries covered by the research. However, in terms of providing information services to users, all surveyed academic librarians sought to provide traditional information services for users, and some libraries have made a step towards the implementation of online education programs and new forms of communication with users.

When it comes to other work processes in academic libraries during the pandemic in the Federation of Bosnia and Herzegovina, the research results show that the cooperation of most surveyed libraries in terms of interlibrary loan and exchange of experiences has improved, but also that the pandemic has had a positive impact on their promotion in the web space and presence on social networks.

The pandemic caused by the COVID-19 virus recognized the need for continuous professional development of academic librarians, stressed the importance of strategic planning in academic libraries, the need for close cooperation between librarians and all participants in higher education, and research on library and information services in public academic libraries of the Federation of Bosnia and Herzegovina, confirms that as a result of the pandemic circumstances, the need for an urgent digital transformation of these public institutions is highlighted.

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