
AI translation · View original & related papers at
chinaxiv.org/items/chinaxiv-202304.00139

A Review of Research and Practice on Emergency Services and Management of Libraries in China for Public Emergencies (Postprint)

Authors: Yang Xiaofei, Sun Jipu, Han Bing

Date: 2023-04-01T16:15:59+00:00

Abstract

[Purpose/Significance] This study aims to systematically review the literature on emergency services and management provided by domestic libraries in response to public emergencies, analyze the current state of research and practice in this domain, and furnish references for future investigations.

[Method/Process] CNKI served as the data source, from which relevant literature was retrieved. Employing content analysis and an integrated theoretical-practical approach, the selected literature underwent comprehensive examination, organization, and synthesis, with particular emphasis on the theoretical frameworks and practical implementations of libraries' emergency services and management in response to public emergencies including the Wenchuan earthquake, SARS outbreak, avian influenza, H1N1 influenza, and the COVID-19 pandemic.

[Results/Conclusion] The content, methodologies, and approaches of library emergency services and management have evolved across different periods and in response to various types of public emergencies. Progressing from initial recognition of the impact of public emergencies on libraries to subsequent development of emergency plans, adoption of emergency measures, and delivery of emergency services, the library community's engagement with public emergency response has grown increasingly significant, standardized, and effective. Nonetheless, certain issues and shortcomings persist, warranting further research and exploration.

Full Text

A Summary of Research and Practice on Emergency Services and Management of Chinese Libraries for Public Emergencies

Yang Xiaofei¹, Sun Jipu², Han Bing³ ¹Dalian Municipal Party School Library, Dalian 116013 ²Dalian Power Supply Company of State Grid Liaoning Electric Power Co., Ltd., Dalian 116000 ³Dalian Polytechnic University Library, Dalian 116034

Abstract: [Purpose/Significance] This paper systematically reviews domestic literature on emergency services and management in libraries during public emergencies, analyzing the current state of research and practice in this field to provide references for future studies. [Method/Process] Using CNKI as the data source, relevant literature was selected from the database and comprehensively analyzed, organized, and summarized through content analysis and a combination of theoretical and practical approaches. The focus was on examining theories and specific practices regarding library emergency services and management in response to major public emergencies such as the Wenchuan earthquake, SARS prevention and control, avian influenza, H1N1 influenza, and the COVID-19 pandemic. [Result/Conclusion] In different periods and in response to different types of public emergencies, the content, methods, and approaches of library emergency services and management have varied. From early awareness of the impact of public emergencies on libraries to later establishment of emergency plans, implementation of emergency measures, and delivery of emergency services, the library community's services and management for public emergencies have become increasingly important, more standardized, and demonstrably more effective. Nevertheless, certain problems and deficiencies remain that warrant further research and exploration.

Keywords: library; public emergency; emergency service; emergency management

Classification Number: G251

DOI: 10.13266/j.issn.0252-3116.2020.15.025

In the process of modernizing human society, with continuous development in science, technology, and economy, and intensifying trends of globalization and informatization, various social risks emerge unexpectedly and may suddenly appear in our surroundings or field of vision. Potential social risks are generally not easily perceived or identified by people, whereas manifest social risks often manifest as public emergencies [?]. Examples include the 2003 SARS outbreak, 2004 avian influenza, 2008 Wenchuan earthquake, 2009 H1N1 influenza, and the COVID-19 pandemic that erupted at the end of 2019. According to the *National Overall Emergency Plan for Public Emergencies* (2006), public emergencies are categorized into four types based on their occurrence process, nature, and mechanism: natural disasters, accidental disasters, public health events, and social

security incidents [?]. Public emergencies significantly impact social stability and public health and safety. Libraries, being closely connected with the public and society, are inevitably affected by public emergencies. How to respond to public emergencies is a practical issue facing modern library management.

Increasing numbers of people have begun to recognize the role of libraries in public emergencies [?], making library emergency services and management for public emergencies increasingly important and meaningful [?]. Effective response and management can prevent and reduce the impact and losses that public emergencies bring to libraries [?]. The COVID-19 pandemic has made the construction of a more comprehensive, systematic, and standardized emergency service management system particularly urgent. Meanwhile, the promulgation of laws and regulations such as the *National Overall Emergency Plan for Public Emergencies* (2006), *Emergency Response Law of the People's Republic of China* (2007), *Opinions on Strengthening Grassroots Emergency Management Work* (2007), and *Regulations on Public Health Emergency Response* (2011 Revision) has provided guidelines for libraries to develop emergency services and management for public emergencies [?], initiating a shift from passive emergency response to proactive prevention in libraries. Theoretical research and practical explorations centered on libraries' responses to public emergencies have achieved phased results. Based on this, the authors systematically analyze the current research status to provide theoretical references and practical guidance for better promoting emergency services and management in Chinese libraries.

Against the backdrop of increasing types of public emergencies with growing scale, frequency, and impact, people's understanding of the concept, connotation, and extension of public emergencies continues to deepen, and the library community's role cognition in public emergencies is continuously evolving. Using CNKI Academic Literature Database as the data source, the authors conducted searches using subject terms including "library emergency service," "library emergency management," "library AND public safety emergency," "library AND public health emergency," "library AND SARS," "library AND Wenchuan earthquake," "library AND avian influenza," "library AND H1N1 influenza," "library AND COVID-19," and "library AND novel coronavirus." The search date was up to May 31, 2020, yielding 193 documents. After deduplication and screening, 139 relevant documents were obtained. Through organizing these documents, issues regarding library emergency services and management for public emergencies can be divided into three categories from the perspective of responding to different types of public emergencies: (1) general research on library emergency services and management for public emergencies; (2) thematic research on library emergency services and management for earthquakes; and (3) thematic research on library emergency services and management for public health emergencies.

2. Current Status of General Research on Library Emergency Services and Management for Public Emergencies

Early research perspectives on library emergency services include: Fang Hong [?] argued that libraries should establish an emergency service system for public emergencies. Xiao Hua [?] proposed strategies for integrated library emergency information resources services and information 弱势群体-oriented emergency information services. He Xi'an et al. [?] explained how the Wuhan Documentation and Information Center of the Chinese Academy of Sciences formulated an “Emergency Service Special Plan” following the “July 5th” incident in Urumqi, Xinjiang. Medical libraries (including those in medical schools, medical institutions, and medical functional departments) should maintain sensitivity to cutting-edge information, collect medical literature and data to provide data support for epidemic prevention work [?], verify information to dispel rumors promptly, maintain dynamic information updates [?], innovate service methods during service delivery [?], improve emergency medical information service mechanisms [?], enhance emergency medical information service levels [?], establish specialized databases, conduct medical information development and research related to epidemics, and establish emergency public health event information assurance systems [?], strengthen information communication, achieve co-construction and sharing of network information resources [?], conduct public health education, and provide training and guidance to other institutions [?].

The development of emergency management plays a decisive role in responding to public emergencies. In the second half of 2003, the Party Central Committee and the State Council deployed the construction of the “one plan, three systems” (emergency plan and emergency management system, mechanism, and legal framework) [?]. The library and information science field conducted a series of studies around this framework, mainly reflected in four aspects: (1) research on library emergency plan construction, including the necessity of developing emergency plans [?, ?], principles and procedures for plan formulation [?, ?], university library emergency plan construction [?], specialized emergency plan research [?], assessment and evaluation of emergency plans [?], and studies on existing problems and deficiencies in current emergency plans [?, ?]; (2) research on library emergency mechanisms, including the main content system of library public emergency mechanisms, existing problems or deficiencies, and specific countermeasures [?]; (3) research on the legal system construction for library emergency management, including institutional norms and legal guarantees [?]; and (4) research on library emergency management systems [?].

Following the COVID-19 outbreak, library emergency services and management have once again attracted academic attention. In terms of case studies, Wang Bo et al. [?] summarized a series of emergency measures and innovative services launched by university libraries nationwide during the pandemic to protect the health of readers and staff and ensure the smooth progress of online teaching and research. Wang Le, Cai Yingchun, and Liu Lei respectively analyzed

business innovations [?] and prevention and control measures [?] at Fudan University Library, Shanghai Normal University Library, and Shenzhen Library. Theoretically, Ke Ping [?] argued that public libraries' emergency management in major public safety emergencies should shift from "absence" to "presence," clarifying their status and role in emergency management, and proposed integrating emergency management throughout the entire development process of emergencies with emphasis on enhancing professional services. Wang Youqiang pointed out that libraries should fully leverage their literature and information resource advantages to play a supportive role in decision-making, research, and publicity during major public safety emergencies. Teng Wuxiao believed that library emergency services require systematic thinking and should build a reader-oriented library emergency management system and a capability-enhancement-oriented library emergency service system. Zhou Lu mentioned that public libraries should play a role in guiding public opinion and bear the responsibility of recording and preserving the truth of the COVID-19 pandemic [?].

3. Specific Practices of Library Emergency Services and Management for Public Emergencies

3.1 Library Emergency Services and Management for the Wenchuan Earthquake

3.1.1 Emergency Service Assurance

- (1) **Leveraging Industry Coordination.** Following the Wenchuan earthquake, the China Library Society organized fundraising, solicited reconstruction strategies, planned assistance programs, and disseminated information through a series of aid actions that effectively promoted the recovery and reconstruction of libraries in disaster areas. Libraries at all levels nationwide carried out donation campaigns of money and books for the earthquake-stricken areas. Cheng Huanwen and others initiated the "Library Home: Aid for Library Professionals" civilian earthquake relief charity project [?].
- (2) **Establishing Temporary Library Service Systems.** Wu Sujuan [?] noted that disaster-area libraries collected books and periodicals through three methods: rescuing buried publications from the earthquake rubble, promptly collecting and organizing donated publications received during post-disaster recovery and reconstruction, and collecting and editing precious Wenchuan earthquake documents. They established board-house libraries, tent libraries, and mobile libraries to create temporary library service systems, providing eight types of services including earthquake knowledge specialty services, post-disaster mobile reading services, and book and periodical lending services.
- (3) **Providing Emergency Information Services.** Cheng Jin et al. [?] summarized the emergency information services provided by the PLA

Medical Library from two perspectives—medical rescue and epidemic prevention: printing the *Wenchuan Post-Earthquake Health and Disease Prevention Knowledge Special Issue* and *Health and Epidemic Prevention Guidelines* popular science flyers; providing knowledge services on toxic substance hazards and prevention to frontline health and epidemic prevention professionals; establishing a Wenchuan earthquake medical information thematic website; offering free medical science and technology literature assurance services to earthquake relief personnel and disaster-area users; and providing counterpart support to medical college libraries and hospital libraries in disaster areas. The Lanzhou Branch of the National Science Library of the Chinese Academy of Sciences established a “Resource and Environmental Science Strategic Intelligence Research Team” to comprehensively collect international scientific and technological information and conduct intelligence analysis on earthquake disaster prediction and early warning, secondary disaster prevention, and building seismic design, providing scientific decision-making support for national earthquake relief efforts.

3.1.2 Enhancing Emergency Management Capabilities The Wenchuan earthquake prompted academic reflection on earthquake emergency management. In recent years, research results on library emergency services and management triggered by earthquakes have been relatively scarce. Twelve years have passed since the Wenchuan earthquake, and people seem to have forgotten that tragic history. However, China’s seismic activity is characterized by high intensity, high frequency, wide distribution, and shallow focal depth, with earthquake disasters featuring instantaneous occurrence, severe destruction, and serious secondary disasters. Therefore, library emergency services and management for earthquakes and other natural disasters remain worthy of attention.

Li Xinrong [?] proposed establishing earthquake emergency management mechanisms and developing emergency plans based on the *Emergency Plan for Cultural Places and Cultural Activities*. Zhu Xun [?] argued for establishing earthquake disaster emergency plans. Cheng Fenggang [?] believed that libraries should establish effective disaster recovery systems to enhance emergency response capabilities. Zhao Yong [?] pointed out that when establishing earthquake emergency plans, libraries should raise awareness, strengthen crisis education for staff and readers, arouse disaster prevention and mitigation consciousness, add emergency early warning equipment and systems, and back up important collections off-site. Wang Yutong [?] argued that libraries should both formulate disaster prevention emergency mechanisms and leverage their educational functions to improve public disaster prevention and mitigation capabilities. Li Xueling [?] proposed establishing emergency mechanisms in post-disaster library planning and reconstruction, and leveraging libraries’ functions in publicity, education, science popularization, and psychological counseling.

3.2 Library Emergency Services and Management for Public Health Emergencies

3.2.1 Library Emergency Services and Management for SARS

- (1) **Strengthening Emergency Prevention Management.** During the SARS period, Zhejiang Library utilized networks, electronic screens, bulletin boards, and wall newspapers to strengthen publicity and education, establishing a SARS prevention office [?]. Shanxi University of Finance and Economics Library organized staff to learn SARS prevention knowledge and methods, conveyed superior requirements and measures, publicized the touching deeds of martyrs who died on the front line of fighting SARS to strengthen staff determination to overcome the epidemic, and distributed oral medication, thermometers, disinfectant, masks, and gloves to employees while implementing seven prevention and control measures [?]. Hong Kong Lingnan University Library provided masks, gloves, disinfectant supplies, and other protective equipment to frontline staff, formulated contingency measures, and assigned the deputy director to oversee SARS prevention work [?].
- (2) **Innovating Emergency Service Methods.** First, guiding readers to use online services. Zhejiang Library donated online reading cards to anti-SARS medical staff. Wenzhou Library held anti-SARS graphic exhibitions, organized the “Reading in Extraordinary Times During SARS” essay competition, publicly shared e-book accounts to encourage online reading, and conducted online reading knowledge competitions [?]. Taihe County Library used service promotion weeks to explain how to use libraries to understand SARS prevention knowledge [?]. Shanxi University of Finance and Economics Library carried out digital reading and online services. Hong Kong Lingnan University Library pioneered a SARS special section in its digital library and cooperated with relevant university departments to use video conferences instead of face-to-face contact. Second, providing SARS thematic information services. The National Cultural Information Resources Sharing Project of the National Library established a SARS knowledge digital resource database for social services. The Wuhan Documentation and Information Center of the Chinese Academy of Sciences wrote special reports, compiled reference materials, and prepared publicity manuscripts during the SARS outbreak [?]. Tsinghua University Library launched an “online consultation” service and created a SARS research materials thematic website [?]. Bethune International Peace Hospital of the PLA provided information to medical staff and patients in isolation wards during SARS, extensively collected information, and used various forms to provide medical basis [?]. The 455th Hospital of the PLA collected domestic and international SARS prevention and treatment information during the epidemic period, strengthening knowledge and information publicity [?]. The Library (Institute of Infor-

mation) of the Chinese Academy of Medical Sciences and Peking Union Medical College edited the *Daily Newsletter on Public Health Emergencies*, reporting on public health emergencies and SARS research developments, and also provided the distinctive SARS bibliometric analysis report *SARS Literature Tracking Analysis and Research Development Trends*.

SARS prevention and control brought beneficial insights to library work and provided new ideas for academic research. Zhang Ge [?] advocated attention to preventive disinfection work in hospital libraries and university libraries, summarizing library work and experience in SARS prevention. Zhang Xiaowei [?] proposed improving library hygiene environments and strengthening library epidemic prevention to effectively curb the spread of infectious diseases like SARS. Su Jingru et al. [?] believed that rapid response networks should be established to address sudden emergencies, library air quality should be improved, and regular disinfection should be maintained.

In summary, research on library emergency services and management for SARS prevention primarily consists of case introductions and experience summaries, lacking in-depth and systematic studies on emergency plans, emergency mechanisms, and specific response strategies, as well as reflection on problems and deficiencies in emergency management.

3.2.2 Library Emergency Services and Management for Avian Influenza and H1N1 Influenza Based on the authors' analysis of existing literature, domestic research results on libraries' prevention and control of H1N1 influenza and avian influenza are relatively scarce, with relevant practical cases scattered in individual documents. Ma Zhuying and Wang Chuanjun [?] listed examples including the "Longjiang Forum" at Heilongjiang Library co-hosting the "Comprehensive Prevention of H1N1 Influenza" special lecture with the Municipal Committee of the Communist Youth League and the Municipal Center for Disease Control and Prevention; the Capital Medical University Library establishing an H1N1 influenza special section on its homepage and an EBSCO special topic on H1N1 influenza with free access to professional H1N1 influenza-related knowledge; and the Wuhan Documentation and Information Center of the Chinese Academy of Sciences writing special reports, compiling reference materials, and preparing publicity manuscripts.

3.2.3 Library Emergency Services and Management for COVID-19 At the end of 2019, the COVID-19 pandemic erupted in Wuhan and rapidly spread nationwide. All 31 provinces, autonomous regions, and municipalities directly under the Central Government activated Level I public health emergency responses, forcing the closure of public cultural venues including libraries. During this special period, libraries at all levels in China carried out emergency services and management around public health epidemic prevention, integration of online and offline services, and supply and assurance of digital information resources.

- (1) **Activating Emergency Response Mechanisms for Epidemic Prevention and Control.** Through analysis of survey reports from university libraries in 29 provinces (autonomous regions, municipalities), Wang Bo et al. [?] found that university libraries established COVID-19 epidemic prevention and control working groups and formulated detailed, operable implementation plans and emergency plans for epidemic prevention and control supervision responsibilities according to unified deployments from higher-level leadership institutions. Twenty-three reports explicitly stated that local regular university libraries had established epidemic prevention working groups or formulated corresponding emergency plans.
- (2) **Donating Emergency Supplies for Epidemic Prevention and Control.** First, the “Aid Wuhan, Overcome Difficulties Together—National Library Community Donation of Emergency Supplies for Epidemic Prevention and Control” campaign. Wei Dawei et al. [?] mentioned that the National Library and China Library Society initiated a proposal, jointly launching a donation campaign with the theme “Aid Wuhan, Overcome Difficulties Together” with libraries nationwide. By February 24, over 100 libraries had participated in this action, raising and donating substantial supplies for colleagues in Wuhan and other Hubei areas. Second, libraries and bookstores in Wuhan established “Book Stations” in Fangcang hospitals. The Hubei Provincial University Library Committee and Hubei Library Society promptly proposed and organized library donations of books and periodicals to “fight the virus with reading,” establishing book corners in Wuhan Fangcang hospitals, isolation points, and hotels for medical teams aiding Wuhan. By February 29, Hubei Provincial Library, Wuhan Municipal Library, district libraries, Xinhua bookstores, and other units had established 23 “Book Stations” in various Wuhan Fangcang hospitals through offline donations of books and magazines and online access to electronic book resources, providing nearly 10,000 books and periodicals [?].
- (3) **Innovating Service Methods and Expanding Service Networks.** To fully implement COVID-19 prevention and control work and effectively avoid infection risks from crowd gatherings to maximize protection of readers’ and frontline staff’s health and safety, libraries proposed the service goal of “Closed libraries but not closed networks, uninterrupted resource services.” Various libraries announced delayed reopening, extended book loan periods without calculating overdue fines, and implemented a series of corresponding supporting measures, releasing reader announcements through multiple channels. Although libraries suspended in-person services during the epidemic prevention and control period, they strengthened the integration, service, and utilization of online resources, enhanced libraries’ social influence and public recognition, and provided assistance for social governance under emergency conditions.

First, innovating lending service methods. Libraries adjusted service methods in

a timely manner based on reader needs and actual conditions, launching services such as “Book Delivery to Buildings,” entrusted borrowing for book lending and returning, “Reservation Borrowing,” “Yunyue” read-and-purchase services, and “Book Delivery” services [?] to ensure that teachers and students could read new books without leaving home.

Second, conducting emergency prevention and control knowledge services. To effectively respond to the epidemic, many libraries pushed emergency prevention information, safety education information, emergency policy information, and emergency case knowledge to readers through WeChat public accounts, library homepages, and other channels in the form of pictures and videos [?, ?].

Third, recommending reading resources and conducting online reading promotion activities. Sun Xinying [?] summarized the reading promotion activities carried out by Henan Provincial Children’s Library during the epidemic spread, pointing out that reading promotion activities during the epidemic should fully leverage the advantages of “Internet Plus,” pay attention to social dynamics, emphasize cooperation with social forces, and achieve online-offline integration. Gong Huaping and Hu Chunqi [?] conducted a network survey and analysis of emergency measures taken by 34 provincial-level public libraries (including Hong Kong, Macao, and Taiwan) during the epidemic period, elaborating in detail on online reading promotion activities of public libraries during closure periods.

Fourth, strengthening digital resource construction and innovating online service methods. Wang Bo et al. systematically summarized innovative practices of university libraries in 29 provinces (autonomous regions, municipalities). Wang Le et al. introduced the “‘Epidemic’ Period Research and Learning” project launched by Fudan University Library [?]. Cai Yingchun et al. introduced Shanghai Normal University Library’s provision of electronic textbooks and integration of free electronic textbook platforms for teachers and students [?]. Wu Wenge summarized the series of services conducted by Anhui Agricultural University Library for online teaching [?]. Liu Baoqing elaborated on the *Library (Museum) Online Resource Assurance Plan* formulated and launched by Central China Normal University Library (Museum) to consolidate the foundation of online resources and technical support and fully ensure online core general education teaching work [?]. Guo Wei et al. summarized the online service measures of Lanzhou University Library and reflected on problems and deficiencies in deepening library online services [?]. Jing Shui and Zhou Ni summarized the characteristic online service methods of university libraries in Shaanxi Province [?]. Zhao Yike analyzed library online service methods and activities in the context of COVID-19 [?].

- (4) **Leveraging Libraries’ Social Value.** First, collecting and preserving social memory. Libraries are repositories of urban memory, and preserving urban memory is libraries’ responsibility and mission. To transmit positive anti-epidemic energy and preserve records of the anti-epidemic battle, many libraries carried out collection campaigns. Fudan Univer-

sity Library launched the “Fudan in the Anti-Epidemic Battle” special collection project. Changsha Library carried out the “Watch and Help Each Other, Fight the Epidemic Together” collection campaign [?]. Capital Library launched a collection campaign for literature and materials on fighting COVID-19 [?]. Zhengzhou Library launched a collection campaign for literature and materials on fighting COVID-19 [?].

Second, coordinated mutual assistance in fighting the epidemic. Libraries used new media platforms such as Weibo, WeChat, and TikTok to coordinate epidemic responses. The National Library, together with Sina Weibo and libraries nationwide, launched series of activities including “Not Alone in Reading During the Epidemic,” “Fighting the Virus with Reading,” “Anti-Epidemic Action,” “Handwritten Cheer Relay,” “Photo Collection for Cheering Wuhan,” “Lighting Up for Wuhan on Lantern Festival,” “Cultural Life at Home Atlas,” and “Hundred Cities Action Fighting the Epidemic,” effectively guiding the public to treat the epidemic scientifically and rationally [?]. Taiyuan Library initiated the “Not Alone in ‘Reading’ During the ‘Epidemic’ Battle” reader card TikTok video love relay activity, with 471 libraries participating. Ankang Library initiated and held the “Fragrance of Books Fighting the Epidemic” national hundred libraries staff letter-writing competition to comfort Wuhan colleagues [?].

- (5) **Conducting Thematic Intelligence Emergency Services.** Information intelligence is fundamental to libraries’ provision of various services. The Wuhan Documentation and Information Center of the Chinese Academy of Sciences leveraged its expertise in biosafety intelligence to conduct emergency intelligence services represented by COVID-19 research dynamic monitoring, providing 78 issues of various bulletins by March 8, 2020, and submitting literature analysis and content 梳理 reports upon user request [?]. The National Library used online reference consultation tools to conduct information compilation, public opinion tracking, and thematic research according to government needs, providing decision-making information support and assurance for public safety, and submitted reviews and thematic reports such as *Policies on China’s Tourism Development During the “SARS” Period and Prevention and Control of COVID-19, and Promoting Orderly Resumption of Work and Production and Relevant Materials on Foreign Government Assistance Measures for the Tourism Industry in Response to Major Epidemics* [?].
- (6) **Emergency Professional Training for Library Staff.** To meet the business learning needs of library professionals, the China Library Society conducted professional training courses for library professionals nationwide through its official website and applications, providing free open access. It also pushed various types of learning resources for free to members, library professionals, and readers through the “Reading Alliance • Digital Shared Reading Service Platform.”

Literature surveys reveal that current research on library emergency services and management during the COVID-19 pandemic primarily consists of case

introductions, innovative practices, and experience summaries, lacking in-depth theoretical exploration and empirical research on emergency management. How to enhance emergency management capabilities and further improve emergency mechanisms remains worthy of in-depth consideration.

The theoretical framework and practical cases in this study demonstrate that Chinese libraries have accumulated certain experiences and achieved certain results in responding to public emergencies. However, weaknesses remain in library emergency services and management in China, and the emergency management system for libraries needs further improvement, requiring strengthened theoretical research and practical exploration. First, there is a serious absence of emergency services in library services, with a general lack of emergency service awareness and related knowledge, and no scientifically effective emergency service mechanisms for responding to public safety emergencies have been established [?]. Second, domestic libraries have only conducted corresponding information and intelligence services for recent public emergencies, lacking integration, data mining, and later utilization of completed emergency intelligence. Third, library emergency management personnel have insufficient understanding of emergency management work, relatively scarce common sense information about emergencies, limited emergency management competence, insufficient experience in emergency services and management for major public health emergencies, and their levels of identification, prevention, early warning, and response to major disasters still need improvement. Fourth, libraries urgently need to strengthen public emergency information education and publicity, emergency knowledge training, emergency drills and psychological counseling, and explore methods and pathways to improve the public's information discrimination capabilities. The resolution of these problems points the direction for our next steps in research.

References

- [?] Shen Zhengfu. Crisis Management, Public Opinion Response, and Empathetic Communication in Public Emergencies: Examination and Reflection Based on the COVID-19 Pandemic [?]. *International Communications*, 2020(2): 42-45, 1.
- [?] National Overall Emergency Plan for Public Emergencies [?]. [?]. <http://www.china.com.cn/chinese/law/1086058.htm>.
- [?] Xia Yuzhu. Libraries Should Establish Emergency Mechanisms for Public Emergencies [?]. *Chinese Journal of Medical Library and Information Science*, 2008(11): 28-30.
- [?] Ma Xianhuang. Reflections on the Wenchuan Earthquake for the Library Community [?]. *Library Construction*, 2009(3): 109-112.
- [?] Zhang Ying. Library Crisis Management: A Case Study Based on the Wenchuan Earthquake [?]. *Contemporary Library*, 2009(12): 38-40.

- [?] Yang Jixian. Viewing Library Crisis Management and Services from the SARS Incident: Experience from Hong Kong Lingnan University Library [?]. *Library and Information Service*, 2003, 47(9): 11-13.
- [?] Xu Guohua. Libraries Should Also Establish Emergency Mechanisms for Emergencies [?]. *Library Work and Study*, 2004(2): 72-74.
- [?] Su Jingru, Du Houde. Enlightenment from SARS Prevention for Libraries [?]. *Shandong Library Quarterly*, 2003(3): 64-66.
- [?] Li Xueling. Enlightenment from the Wenchuan Earthquake for the Library Community [?]. *Higher Vocational Education - Journal of Tianjin Vocational Institute*, 2009(8): 86-89.
- [?] Liu Xiue. Compiling Library Emergency Plans to Improve Disaster Prevention Capabilities [?]. *Library Work and Research*, 2006(2): 85-87.
- [?] Liu Bingyin. Response to and Reflection on Library Emergencies [?]. *Culture Industry*, 2018(4): 31-34.
- [?] Hu Xiao. Analysis and Comparison of Emergency Plans for University Library Emergencies [?]. *Library and Information Service*, 2008(5): 17-20.
- [?] Fang Hong. Discussion on Library Services in Public Emergencies [?]. *Sichuan Library Journal*, 2008(5): 17-20.
- [?] Xiao Hua, Zeng Yunhua. Library Emergency Information Resources Integration Service Strategy Based on User Needs [?]. *Library Theory and Practice*, 2017(6): 78-81.
- [?] Xiao Hua. Exploration of Emergency Information Service Approaches for Information Vulnerable Groups from the Perspective of Library Service Functions [?]. *Library Research*, 2017(7): 19-22.
- [?] He Xi'an, Zhang Xiaoyun, Ren Hong, et al. Emergencies and Library Emergency Services: The "Emergency Service Special Plan" and Reflections in Response to the "July 5th" Incident in Xinjiang [?]. *Library Theory and Practice*, 2011(1): 6-8.
- [?] Cheng Aijun. Information Services in Public Health Emergencies Under New Situations [?]. *Journal of Preventive Medicine Information*, 2012, 28(2): 150-151.
- [?] Li Yan. Necessity and Countermeasures of Government Information Disclosure in Public Health Emergencies [?]. *Journal of Fujian Institute of Socialism*, 2013(1): 94-96.
- [?] Chen Rui, Dong Ying. Discussion on Service Innovation of Medical Libraries in Public Emergencies [?]. *Proceedings of the 12th National Academic Annual Conference on Medical Scientific Research Management of the Chinese Medical Association*. Chengdu: Editorial Department of Chinese Medical Research Management Magazine, 2010: 131-132.

- [?] Zhu Hong, Yan Bei, Zhang Yanru. Countermeasures for Medical Libraries in Response to Public Health Emergencies [?]. *Chinese Journal of Medical Library and Information Science*, 2015(5): 50-52.
- [?] He Wei, Chen Rui, Cheng Jin, et al. Discussion on the Role and Measures of Medical Libraries in Emergency Health Information Services During Emergencies [?]. *Journal of Medical Informatics*, 2009(2): 12-14.
- [?] Wang Xiaojuan, Wu Luohua. Discussion on Emergency Medical Information Services of Preventive Medicine Libraries in Public Health Emergencies [?]. *Journal of Medical Informatics*, 2011(11): 55-57.
- [?] Luo Rongqing, Zhang Li. Discussion on Medical Information Emergency Services in Emergencies [?]. *Chinese Journal of Natural Medicine*, 2009(5): 401-402.
- [?] Zheng Ping, Luo Shulian, Tang Chunxia, et al. Hospital Library and Information Work in Emergencies [?]. *Chinese Journal of Medical Library and Information Science*, 2014(10): 41-43.
- [?] Wang Guizhi, Chai Yulan. Medical Intelligence Service Units Should Establish Information Assurance Systems for Public Health Emergencies [?]. *Journal of Preventive Medicine Information*, 2004(6): 661-662.
- [?] Zhang Jing. Exploration of Information Consultation Services of Provincial CDC Libraries Under Network Environment [?]. *Journal of Medical Informatics*, 2011, 32(12): 67-70.
- [?] Fang Xianghui, Xin Changmao. Discussion on Information Services of Medical College Libraries Based on Public Health Emergencies [?]. *China Medical Equipment*, 2014, 11(3): 74-76.
- [?] Zhu Yongxing. Current Status and Prospects of Domestic Emergency Management Research [?]. *Management Observer*, 2017(22): 60-63.
- [?] Tang Jing. Discussion on the Formulation of Various Emergency Plans for Libraries [?]. *Science and Technology Information*, 2010(33): 625.
- [?] Du Ping. Preliminary Study on Emergency Plan Mechanisms for University Libraries Under the New Era Background [?]. *Heilongjiang Science and Technology Information*, 2010(S1): 27-28.
- [?] Fang Gang. My View on Establishing Emergency Plans for Public Libraries [?]. *Jin Tuxue Yuan*, 2016(1): 8-9.
- [?] Yang Guangmin. Necessity of Formulating Emergency Plans for University Libraries [?]. *Journal of Changchun Education Institute*, 2009(3): 64-65.
- [?] Tang Chengyi, Ding Hairong, Li Yong. Research on Emergency Plans for University Libraries Under Open Service Models [?]. *Journal of Chengdu University of Technology (Social Sciences Edition)*, 2012(2): 106-109.

- [?] Yu Pengyan. Construction and Evaluation of Emergency Plans for University Libraries [?]. *Modern Intelligence*, 2012(9): 37-40.
- [?] Guo Xiaoyan. Prevention Before Disaster: Earthquake Emergency Plans for University Libraries [?]. *Hebei Sci-Tech Library Journal*, 2011(3): 14-15.
- [?] Zhu Xun. Research on Establishing Earthquake Disaster Emergency Plans for Libraries [?]. *Library and Information Service*, 2009, 53(8): 74-77.
- [?] Hou Yong. Discussion on Formulating Prevention and Emergency Plans for Library Network Information Security [?]. *Henan Library Journal*, 2015(5): 129-131.
- [?] Yu Pengyan. Construction and Evaluation of Emergency Plans for University Libraries [?]. *Modern Intelligence*, 2012(9): 37-40.
- [?] Zhao Ling. Research on Emergency Plan Construction for University Libraries [?]. Shenyang: Northeastern University, 2013.
- [?] Wei Siting. Analysis of Current Status and Countermeasures of Library Emergency Plans [?]. *Library Construction*, 2010(5): 74-75.
- [?] Sun Xiao, Wei Yiyao. Emergencies and University Library Management [?]. *Journal of Academic Libraries*, 2005(5): 82-85.
- [?] Zhang Liping. Discussion on Countermeasures for University Library Emergencies [?]. *Inner Mongolia Science Technology and Economy*, 2011(12): 155-156.
- [?] Lin Guilan. Analysis of Library Information Services in University Public Emergencies [?]. *Journal of Agricultural Library and Information Science*, 2010(11): 318-340.
- [?] Chen Xiaorong. Research on the Legalization of Library Crisis Management [?]. *Library World*, 2010(6): 28-38.
- [?] Wan Xiaoyu. Measures Taken by Libraries When Facing Emergencies and Crises [?]. *Science and Technology Information*, 2010(9): 255.
- [?] Shi Huiyuan. Research on Crisis Management of Infectious Disease Public Health Emergencies in University Libraries [?]. *Library Construction*, 2010(5): 71-73.
- [?] Wang Bo, Zhou Chunxia, Chen Ling, et al. Actively Integrating into the Overall COVID-19 Prevention and Control Situation, Effectively Innovating Service Strategies for Extraordinary Times—Survey Report on Service Innovation of University Libraries Nationwide During the Epidemic Prevention and Control Period [?]. *Journal of Academic Libraries*, 2020(3): 5-17.
- [?] Wang Le, Yuan Yuhong, Zhang Chunmei, et al. Characteristic Services and Management Practices of University Libraries Under Major Public Health Emergencies—Case Study of Fudan University Library's Response to COVID-19 [?]. *University Library Work*, 2020(3): 57-61.

- [?] Cai Yingchun, Mu Weiguo, Duan Xiaolin, et al. Practice and Reflection on Emergency Services of University Libraries—Case Study of Shanghai Normal University Library [?]. *University Library Work*, 2020(3): 62-66.
- [?] Liu Lei. Discussion on Prevention and Control Measures of Public Libraries Under COVID-19—Case Study of Shenzhen Library [?]. *Public Library*, 2020(3): 58-61.
- [?] Ke Ping, Bao Xin. The Status and Role of Public Libraries in Responding to Public Safety Emergencies [?]. *Library Tribune*, 2020, 40(4): 1-5.
- [?] Wei Dawei, Liao Yongxia, Ke Ping, et al. Emergency Services of Libraries in Major Public Safety Emergencies [?]. *Library Magazine*, 2020(3): 4-18.
- [?] Zhang Guangqin, Chen Lin. Analysis of Disaster Assistance Practices of Chinese Library Professional Organizations: Case Study of Wenchuan Earthquake [?]. *Journal of Library Science in China*, 2010(5): 45-50.
- [?] Shang Zhuang. Enrichment, Expansion, and Sublimation of Library Spirit Triggered by the May 12 Wenchuan Earthquake [?]. *Contemporary Library*, 2009(3): 21-29.
- [?] Wu Sujuan, Ruan Juhong. Management of Temporary Library Information Services in Wenchuan Earthquake Disaster Area [?]. *Library and Information Service*, 2009(12): 38-40.
- [?] Cheng Jin, Zhan Youxiang, Chen Rui, et al. Practical Summary and Reflection on Wenchuan Earthquake Medical Information Services [?]. *Chinese Journal of Medical Library and Information Science*, 2009(2): 5-6.
- [?] Li Xinrong. Enlightenment and Countermeasure Research on Library Emergency Management Mechanism from the Wenchuan Earthquake [?]. *Library and Information Service*, 2009, 53(6): 92-95.
- [?] Cheng Fenggang. Construction and Management of Digital Collection Disaster Recovery Systems [?]. *Lantai World*, 2012(10): 58-59.
- [?] Zhao Yong, Sun Chengquan. Discussion on Emergency Countermeasures for Libraries in Earthquakes and Other Sudden Geological Disasters [?]. *Library and Information Service*, 2009, 53(6): 92-95.
- [?] Wang Yutong. How Libraries Should Respond to Earthquakes and Other Natural Disasters: Reflections on the Wenchuan Earthquake for Librarians [?]. *Modern Intelligence*, 2008(11): 132-135.
- [?] Li Xueling. Enlightenment from the Wenchuan Earthquake for the Library Community [?]. *Higher Vocational Education: Journal of Tianjin Vocational Institute*, 2009(4): 86-89.
- [?] Feng Fei. Strengthening Publicity and Education to Ensure Ideological Stability: Discussion on Library Work During the “SARS Period” [?]. *Library Research and Work*, 2003(9): 26-27.

- [?] Gao Yunping. Discussion on Library Management Art from the Perspective of SARS Prevention and Control [?]. *Jin Tuxue Kan*, 2005(1): 60-62.
- [?] Zheng Xiaoxiao. Discussion on the Function of Public Libraries in Social Emergencies [?]. *Library and Information*, 2005(4): 43-46.
- [?] Relying on Science to Fight SARS: Side Notes on Taihe Library Service Promotion Week Activities [?]. *Jiangxi Library Journal*, 2003(2): 71.
- [?] Li Yan. The Role of Hospital Libraries in SARS Prevention and Control [?]. *Chinese Journal of Medical Library and Information Science*, 2003(6): 35.
- [?] Zhang Guiyu. SARS Prevention and Library Work [?]. *Chinese Journal of Medical Library and Information Science*, 2004(3): 22-23.
- [?] Zhang Ge. Hospital Library Preventive Disinfection Work Should Be Noticed: Summarizing Library Work and Experience in SARS Prevention [?]. *Medicine Theory and Practice*, 2005(5): 606.
- [?] Zhang Xiaowei. Reflections During the “SARS Period”: Discussion on Library Hygiene Environment Construction [?]. *Library Research and Work*, 2003(3): 21-22.
- [?] Ma Zhuying, Wang Chuanjun. Countermeasures for Libraries in Response to Public Health Emergencies [?]. *Henan Library Journal*, 2010(4): 74-76.
- [?] Xinhua Net. Feature: Wuhan Fangcang Hospitals Establish “Book Stations” to Comfort Patients’ Souls [?]. [?]. http://www.xinhuanet.com/local/2020-02/29/c_1125644941.htm.
- [?] Wang Huisen, Peng Lihong, Zhou Qian. University Library Service Work Under COVID-19: Case Study of University of Electronic Science and Technology Library [?]. *University Library Work*, 2020(3): 84-86.
- [?] Gong Huaping, Hu Chunqi. Emergency Measures and Development Enlightenment of Public Libraries During the Epidemic Period [?]. *China Management Informationization*, 2011(10): 50-51.
- [?] Guo Yajun, Zhang Hanwen, Lu Xingyu. Research on Emergency Services of Public Libraries in Public Health Emergencies [?]. *Digital Library Forum*, 2020(5): 36-42.
- [?] Sun Xinying. Practice and Enlightenment of Public Library Reading Promotion Under National Epidemic Situation: Case Study of Henan Provincial Children’s Library [?]. *Library Research and Work*, 2020(4): 18-21.
- [?] Wu Wenge. Comprehensive Guarantee of Smooth Access Channels for Teachers and Students’ Literature [?]. *Library News*, 2020-03-13(9).
- [?] Liu Baoqing. Not Forgetting Service Original Aspiration, Bravely Undertaking Anti-Epidemic Mission: Anti-Epidemic Record of Central China Normal University Library (Museum) [?]. *University Library Work*, 2020(3): 5-7.

[?] Guo Wei, Wang Rui, Wang Yong. Reflections on University Libraries' Online Services During COVID-19 Prevention and Control: Case Study of Lanzhou University Library [?]. *University Library Work*, 2020(3): 71-74.

[?] Jing Shui, Zhou Ni. Crisis Management Strategies and Reflections of University Libraries in Shaanxi Province [?]. *University Library Work*, 2020(3): 22-28.

[?] Zhao Yike. Analysis of Library Online Services in the Context of COVID-19 [?]. *Journal of Luoyang Institute of Technology*, 2020(2): 92-96.

[?] Changsha Library "Watch and Help Each Other, Fight the Epidemic Together" Collection Campaign [?]. *Changsha Evening News*, 2020-02-07(8).

[?] Capital Library Launches Collection Campaign for Literature and Materials on Fighting COVID-19 [?]. *Library News*, 2020-03-27(2).

[?] Zhengzhou Library Launches Collection Campaign for Anti-Epidemic Literature and Materials [?]. *Library News*, 2020-03-06(2).

[?] Hands of Solidarity Welcoming Spring: China Library Society Coordinates National Library Community to Launch Anti-Epidemic Action [?]. *Library News*, 2020-03-13(1).

Author Contributions: Yang Xiaofei: Topic selection, conceptual structure, and paper writing; Sun Jipu: Participated in literature research and data compilation; Han Bing: Participated in literature research and provided improvement suggestions.

A Summary of the Research and Practice on the Emergency Service and Management of Chinese Libraries for Public Emergencies

Yang Xiaofei¹, **Sun Jipu**², **Han Bing**³ ¹Dalian Municipal Party School Library, Dalian 116013 ²Dalian Power Supply Company of State Grid Liaoning Electric Power Co., Ltd., Dalian 116000 ³Dalian Polytechnic University Library, Dalian 116034

Abstract: [Purpose/significance] This paper systematically sorts out relevant researches on emergency service and management of domestic libraries for public emergencies, and summarizes the research status in this field, so as to provide references for future researches. [Method/process] This paper took CNKI as data sources, selected relevant literatures from the database, conducted by using content analysis from the perspective of theory combined with practice. The related documents were systematically analyzed and summarized, focused on the research and practice on the emergency service and management for Wenchuan earthquake, prevention and control of SARS, avian influenza, influenza A H1N1 and prevention and control of COVID-19. [Result/conclusion] In different periods, in response to different types of public emergencies, the contents and methods of library emergency service and management are different. In recent

years, there is an increasing awareness of the importance of public emergencies on the library in the library community, such as, establish emergency plans, took the emergency measures and emergency services. The emergency service and management for public emergencies are more and more standardized, the effect is more and more obvious. However, there are still some problems and deficiencies, which are worth further study and exploration.

Keywords: library; public emergency; emergency service; emergency management

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.