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Domestic Health Communication Research in the Post-Pandemic Era: Theoretical Development and Practical Landscape

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Abstract

The outbreak of the COVID-19 pandemic has furnished health communication studies with a unique research arena, characterized by the emergence of diverse topics, complex multi-agent interactive communication scenarios, and interdisciplinary research perspectives, culminating in a concentrated outpouring of research findings within a short timeframe. Research hotspots primarily encompass the discursive construction of mainstream media in pandemic-period health information dissemination, mechanisms and governance of health information propagation on social media, influence mechanisms linking population health risk perception and health information exposure to health behaviors, as well as public opinion guidance and rumor governance. Health communication is intimately intertwined with risk communication and science communication, while the development of information technologies such as intelligent health services including cloud-based healthcare has endowed health communication with novel characteristics. The “communication-oriented” feature of health communication research has become increasingly salient, with interdisciplinary collaboration deepening further; nevertheless, constraints persist in the construction and application of research theories, the research paradigm awaits breakthrough, and there exists a necessity to further innovate the concept of “health” and transition toward practicing human-centered health communication research.

Full Text

Health Communication Research in China in the Post-Pandemic Era: Theoretical Development and Practical Prospects

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Abstract

The outbreak of the COVID-19 pandemic has provided a unique research domain for health communication studies. Diverse topics have emerged alongside complex, multi-actor interactive communication scenarios and interdisciplinary research perspectives, resulting in a concentrated outpouring of research findings in a short period. Key research hotspots include mainstream media discourse construction during pandemic health information dissemination, social media health information dissemination mechanisms and governance, population health risk perception and its relationship with health information exposure, influence mechanisms on health behaviors, public opinion guidance, and rumor governance. Health communication is closely intertwined with risk communication and science communication, while the development of information technologies such as cloud-based medical services has endowed health communication with new characteristics. The “communication-oriented” feature of health communication research has become increasingly prominent, and interdisciplinary collaboration has deepened further. However, constraints remain in theoretical construction and application, and research paradigms await breakthroughs. There is a need to further innovate the concept of “health” and shift toward practicing “people-centered” health communication research.

Keywords: post-pandemic era, health communication, Citespace, content analysis

The COVID-19 outbreak at the end of 2019 brought an unprecedented public health crisis that profoundly impacted global socioeconomic development and every individual’s daily life, continuing to threaten human health and well-being to this day. Throughout society’s response to COVID-19, numerous research topics in health communication emerged, including “infodemics,” health risks, and vaccination. Health communication scholars conducted multi-dimensional discussions on information dissemination, public opinion guidance, media governance, and health education during the pandemic, constituting a new landscape for health communication research within a crisis context. As the world enters the post-pandemic era [1], domestic health communication research in China will enter a new development stage bearing the unique imprint of this “pandemic prevention and control” period. This paper examines the main research topics, distribution of research hotspots, and application of theories and methods in health communication since the COVID-19 outbreak, summarizing the distinctive characteristics of domestic health communication research in the post-pandemic era in terms of theoretical development and practice.

Main Research Topics in Domestic Health Communication in the Post-Pandemic Era

To more intuitively present the distribution of main research topics in domestic health communication since the pandemic began, this section employs bibliometric analysis based on CiteSpace. Literature retrieval and review reveal that unlike foreign health communication research, which is largely concentrated in two SSCI journals—*Health Communication* and *Journal of Health Communication*—and can basically represent major international research trends [2,3], domestic health communication topics are scattered across journals in multiple disciplines including communication studies, medicine, and information science, making journal-based bibliometric analysis difficult [4]. Therefore, for Chinese literature, this study conducted subject searches on CNKI using keywords such as health communication, health information, COVID-19, epidemic, and communication. The search formula was $SU=(\text{health communication}+\text{health communication}+\text{health information})/((\text{COVID}+\text{COVID-19}+\text{epidemic}+\text{novel coronavirus}+\text{public health}+\text{health})*(\text{news}+\text{reporting}+\text{communication}+\text{media}+\text{medium}+\text{information}+\text{Weibo}+\text{WeChat}+\text{short video}+\text{advertisement}))$, limited to journal articles from SCI source journals, Peking University Core, CSSCI, and CSCD databases, with a time span of 2020-2022. A total of 1,682 papers were retrieved. After screening, literature from infectious disease, epidemiology, and clinical medicine that was not related to communication studies was removed, yielding 1,540 valid results.

1. Discipline and Journal Distribution

First, analyzing the disciplinary distribution of health communication-themed research papers, according to CNKI's subject classification statistics, among the 1,540 papers from 2020-2022, 631 (40.97%) belong to journalism and communication, followed by preventive medicine and hygiene (138 papers, 8.96%), medical and health policy (108 papers, 7.01%), and library/information science and digital libraries (106 papers, 6.88%).

From a journal distribution perspective, as shown in [Figure 1: see original paper], journalism and communication journals hold an absolute majority. The four journals *Youth Journalist*, *Media*, *TV Research*, and *China Radio & TV Academic Journal* account for over 25% of relevant articles. Preventive medicine journals such as *Chinese Journal of Health Education* and library/information science journals such as *Library and Information Service* each account for approximately 3%, consistent with the disciplinary distribution trend.

2. Main Research Topics

To further organize the main research topics in China's health communication field during the post-pandemic period, CiteSpace was used for co-word analysis. The time span was set to 2019-2022, with a single time slice of 1 year. Clustering terms were sourced from titles, abstracts, and author keywords. The term source

selected was burst terms, node type was keyword, and the top 50 keywords with the highest citation frequency in each time zone were extracted. The resulting keyword map is shown in [Figure 2: see original paper]. The map contains 268 nodes, 272 connections, and a network density of 0.0076, where keywords with higher frequency appear as larger nodes.

The results show that, in terms of keyword co-occurrence frequency, besides “epidemic prevention and control,” “COVID-19,” and “health communication,” high-frequency keywords include “mainstream media,” “short videos,” and “social media.” Specifically, discussions on “epidemic prevention and control” primarily address media convergence and information reporting [5,6], online public opinion response and rumor governance [7,8], and media use effects [9,10]. Research topics related to “COVID-19” include epidemic information release [11,12], public opinion guidance [13], residents’ health information acquisition and utilization behaviors [14], doctor-patient relationships [15], and care for special populations [16]. “Health communication”-related research topics include residents’ health behavior patterns [17], health communication strategy construction [18,19], communication effect evaluation [20], health communication platform construction and regulation [21], and media contact, particularly social media contact and use [22,23]. Discussions on “mainstream media” involve mainstream media communication ecology construction [24], innovative communication strategies [25], and the impact of innovative media forms such as short videos [26,27]. “Short video”-related research topics include short video content production and dissemination mechanisms [28,29], the main role of short videos in epidemic prevention and control [30], and short video platform and content governance [31]. Discussions on “social media” involve the role and communication mechanisms of social media in risk communication [32], behavioral studies of social media use [33,34], and social media governance, particularly identification and handling of false information [35,36].

Betweenness centrality is an important indicator for measuring the structural properties of nodes in a network. A node with high betweenness centrality indicates that its corresponding articles are mostly interdisciplinary, connecting two or more different disciplinary nodes and serving as a hub [37]. Calculating and ranking the betweenness centrality of each keyword in CiteSpace shows that keywords with high co-occurrence frequency, such as “health communication,” “short videos,” “social media,” “COVID-19,” and “mainstream media,” also have high betweenness centrality, connecting multiple research subjects and different research perspectives.

shows the list of high-frequency and high-betweenness-centrality keywords.

Hotspot Research Areas in Domestic Health Communication in the Post-Pandemic Era

To further deepen the co-occurrence relationships between keywords and identify main research hotspots, CiteSpace’s keyword clustering function was used

for cluster analysis. Using the Log-Likelihood Ratio (LLR) algorithm, the clustering map shows a Modularity Q-value of 0.6835 (>0.3), indicating significant clustering results, and a Mean Silhouette S-value of 0.8643 (>0.7), meaning high clustering reliability [37]. The clustering visualization is shown in [Figure 3: see original paper].

Scholars have closely focused research on health communication media, content, and effects, forming 14 keyword clusters. Cluster names, node sizes, silhouette values, and cluster labels are shown in . After organizing and analyzing these clusters, four major hotspot research areas were identified.

3. Construction of Mainstream Media Discourse Systems in Pandemic-Era Health Information Dissemination

This research hotspot includes the main clusters #health communication, #People's Daily, and #client apps. Scholars have approached mainstream media discourse system construction from two aspects: content production and release strategies for mainstream media health information, and the evolution of mainstream media from the perspective of short videos.

Since the COVID-19 outbreak, the complex and changing epidemic prevention situation has led to a dramatic increase in information flow volume and speed, with mixed true and false information posing significant challenges to the public's information reception and discrimination abilities. In this context, authoritative, truthful, and comprehensive reporting by mainstream media has been key to building consensus on disaster prevention, eliminating information gaps, and effectively responding to emergencies. Regarding how mainstream media can optimize content production and release strategies to disseminate health information more efficiently, scholars have focused on the basic principles, logical space, and internal tensions of mainstream media content production, as well as mainstream media's grasp of scientific rationality and accurate detection and response to public information needs when reporting on uncertain topics such as public health emergencies. They have proposed optimization strategies for innovating discourse systems, expanding communication channels, and innovating content presentation techniques. Additionally, exploration and effect evaluation of popularization strategies for health science information disseminated by medical institutions have attracted considerable attention.

As the most active product form on current internet platforms, short videos have participated in mainstream media's "epidemic" news reporting and become an important manifestation of mainstream media iteration and upgrading. Behind short video content production by mainstream media lies the effective integration of media technology, economic capital, and social influence resources. Through efficient production mechanisms, three-dimensional visual expression, and rich emotional regulation strategies, short videos have demonstrated distinctive characteristics in narrative perspective, discourse patterns, and value presentation during health information dissemination [38]. Compared with text

media, short videos have stronger visual impact and fragmented characteristics, better aligning with public information acquisition habits, and have become one of the important channels for health information contact. Scholars have focused on discussing the strategies, characteristics, and trends of short video content production by mainstream media during the pandemic, arguing that short video content presentation has endowed mainstream media with greater flexibility—enabling communication, dialogue, and exchange with the public using the same audio-visual forms and discourse methods on the same interface, playing important roles in emotional mobilization, promoting value identification and emotional belonging, and constructing scientific images. Furthermore, mainstream media iteration and upgrading are also manifested in the wide application of emerging technologies: during critical stages of fighting the epidemic, 5G, with its high speed, low latency, and wide connectivity, greatly optimized the entire process of news information collection, release, and interaction for mainstream media; AI anchor technology combining data algorithms with broadcasting professionalism was widely applied in epidemic reporting and response; and visual innovation applications such as “news posters” greatly enhanced the dissemination efficiency of core information and public acceptance. There have also been many discussions and explorations on how mainstream media can innovate health information dissemination models under the empowerment of new technologies.

4. Mechanisms and Governance of Social Media Health Information Dissemination During the Pandemic

This research hotspot includes the main cluster #social media. Social media encompasses both public social networks such as Weibo, Zhihu, and Renren, as well as private social platforms such as WeChat and QQ. With the continuous enrichment of social media platform functions and the further expansion of user scale, social media has become the most direct and convenient channel for the public to obtain health information, as well as the most important channel for releasing health information, conducting health consultations, and seeking disease treatment [32]. Post-pandemic discussions on social media from a health communication perspective have concentrated on three dimensions: first, analysis of the logic and influencing factors behind public health information seeking and forwarding behaviors on social media; second, exploration of social media’s role in bridging public health resource inequalities and promoting public communication and participation during the pandemic, as well as discussions on using social media platforms to assist in public health event early warning and monitoring based on massive social network data; and third, governance of health information on social media platforms.

As social media has become the main channel for health information dissemination, topics such as social media users’ health information contact, alternative information seeking, forwarding behaviors, and information avoidance behaviors have become important research fields. Scholars have discussed these from mul-

multiple stages including health information cognition, behavioral motivation, and behavioral implementation. Discussions under the health information cognition dimension include cognition of health information content, information quality, and health information risk assessment. The behavioral motivation dimension involves measuring users' health information acquisition needs, resisting information anxiety, or avoiding health losses. The behavioral implementation dimension includes factors influencing alternative health information seeking and forwarding behaviors, mechanisms of action, or measurement of behavioral execution intentions. Hot research topics include the function of social media in rural epidemic mobilization, social media user fatigue and switching behaviors, and the impact of social media use on vaccination behavior.

Influenced by factors such as socioeconomic status, living environment, and health literacy, inevitable inequalities exist among individuals in accessing and utilizing health information resources, which often imply health risks or even health disasters [32]. Social media provides a good channel for the public to obtain health information and participate in interactions, where any member of the public can become a communication center and bridge public health communication inequalities through public participation, establishing a relationship beyond information exchange between government and the public to promote more informed government decision-making. Discussions on public participation in health communication based on social media mainly proceed from public communication and public practice. At the beginning of public health emergencies, the key to information communication is for the government to convey accurate and truthful information to the public through various channels in a timely manner, using social media platforms to help the public establish correct cognition and guide public health behaviors. Public practice encompasses relevant officials, professionals, and the public and media organizations filled with various perceptions, with social media's collaborative nature promoting multi-directional information flow among these groups.

In public health emergencies, social media's characteristics of wide connectivity and rapid information flow also provide breeding grounds for rumor spread and emotional incitement, making information governance on social media an important research dimension. This mainly includes exploration of misinformation types, dissemination subjects, and information propagation mechanisms on social media, identification of false health information characteristics, combating "infodemics" on social media, evaluation of debunking information dissemination effects, and, with further information technology development, the functions and challenges of social bots in public crisis communication have gradually attracted more attention.

5. Influence Mechanisms of Population Health Risk Perception, Health Information Exposure, and Health Behaviors

This research hotspot includes the main clusters #media literacy, #behavior, #social mentality, #health education, and #risk perception. After organizing, discussions in this hotspot mainly proceed from two aspects: first, residents' cognition of and response to health risks; and second, attention to health education, health literacy, and health behaviors of key populations.

Rapid social development has brought increased uncertainties of various kinds, with intertwined risk factors making risk society the new normal. Health risk factors widely exist in people's daily lives, and since the COVID-19 outbreak, perception, identification, and response to health risk factors have become key links in epidemic prevention and control. Regarding risk perception, some scholars have constructed influence factor models for risk information perception from perspectives including information sources, content, users, government emergency performance, and social environmental signals [39], while others have compared the multiple roles of social media and authoritative media in influencing residents' risk perception and epidemic prevention behaviors [40]. Medical personnel and scientists, as important information release subjects in health communication, have their cognition of and response to COVID-19 risks related to whether an orderly epidemic information dissemination system can operate smoothly. Therefore, there has been considerable research on risk response statements and practices of medical personnel and scientists, extending to discussions on public trust and persuasion effects [41,42].

Guiding health education, health literacy, and health behaviors of key populations, particularly health-vulnerable groups, has always been a hot topic in health communication. The health risks derived from COVID-19 have caused deeper impacts on key populations. In this context, scholars have focused on discussing the current situation and main influencing factors of health information contact, health information source selection, alternative health information seeking, health information sharing, and health information avoidance behaviors among the elderly [43]. Besides the elderly, topics such as rural residents' understanding of and health needs regarding public health emergencies, interactive health literacy of adolescents in impoverished areas, health education and health literacy of migrant populations, and COVID-19 knowledge-attitude-practice among university students also occupy certain proportions. Regarding health behaviors, COVID-19 vaccination behavior has received considerable attention, with research angles including vaccination cognition and willingness, cognitive framing studies of how media contact influences public COVID-19 vaccination willingness, and the impact of COVID-19 vaccine information frames on vaccine hesitancy. Additionally, some scholars have focused on the expression and shaping of public social mentality in cyberspace during major public health emergencies, conducting empirical studies on public risk perception, social mentality, and resulting behavioral patterns using data and econometric

models [44].

6. Public Opinion Guidance and Rumor Governance During the Pandemic

This research hotspot includes the main clusters #rumor governance, #information governance, #online public opinion, #credibility, and #COVID-19. The COVID-19 outbreak triggered high levels of public attention in a short time, with frequent public opinion hotspots and sustained public enthusiasm. The uncertainty of epidemic information and the public's lack of scientific understanding of the novel coronavirus created opportunities for online rumor spread and diffusion. Public opinion guidance and rumor governance became intertwined, greatly testing government governance capabilities, with maintenance and enhancement of government credibility becoming a key link. Therefore, scholars' discussions on public opinion guidance and rumor governance during the pandemic mainly proceed from three dimensions: research on online public opinion dissemination mechanisms and intervention, analysis of online rumor characteristics and governance paths, and research on government image building and credibility enhancement.

Against the backdrop of epidemic prevention and control, online public opinion generates, ferments, and erupts rapidly, presenting characteristics of flattened public opinion patterns, noisy content, fragmented forms, superimposed effects, and complex ecosystems [45]. In research on online public opinion dissemination mechanisms, scholars have focused on discussing multi-attribute evolution patterns of crowds, content, and emotions in major epidemic-related online public opinion [46], exploring evolutionary games among three types of subjects in online public opinion governance: information producers, information transmitters, and information decomposers [47], and analyzing spatiotemporal evolution differences and governance strategies in public health emergencies based on sentiment analysis and rational therapy perspectives.

Another perspective in online public opinion research concerns intervention strategies for self-media and short video platforms. In the context of major epidemics, self-media and short video platforms spread online public opinion more widely and for longer durations, creating greater pressure and difficulty for public opinion governance. After analyzing relevant platforms' public opinion evolution patterns, researchers have proposed strategies such as improving prevention and control of blind spots in self-media online public opinion and building big data-based early warning systems for self-media online public opinion [48].

Research on online rumor governance in health communication focuses on rumor generation triggers, paths, dissemination mechanisms, and governance strategies. As a complex information structure, online rumors represent a distorted form of online public opinion. Research finds that rumor generation and spread are closely related to government information absence and power games, me-

dia anomie and circle polarization, public panic and literacy deficiency, and other factors. Internet characteristics such as fission dissemination, social endorsement, and anonymous technologies accelerate rumor diffusion [49]. Scholars have constructed online rumor dissemination models based on epidemiology or information science theories to analyze internal mechanisms affecting rumor spread, deconstruct general paths of “infodemic” generation and development, and evaluate the impact of rumors in specific events and debunking effects during the pandemic. Rumor governance emphasizes the importance of government credibility building, constructive journalism concepts and practices by mainstream media, legal system improvement, and public media literacy cultivation. Meanwhile, with the further development of big data and artificial intelligence, a new paradigm of decentralized, human-machine collaborative rumor governance with internet platform enterprises as key responsible subjects is gradually maturing [50].

Government image communication and credibility building during public health emergency response are key to effectively resolving public crises. Scholars have focused on government epidemic information release strategies, press conference quality, government response strategies in online public opinion, discourse strategies of government officials, and government image repair, discussing topics such as the path of building government trust through COVID-19 information release, official and civil risk communication strategies in public health emergencies, and government image communication construction and optimization from a crisis rhetoric perspective.

Research Theories and Methods

The use of research theories presents two major characteristics. First, overall, scholars’ utilization of classic theories in health communication research is not high. Among the 1,540 included articles, only 122 explicitly used classic models or theories as their research foundation. Most articles focused on specific research topics based on self-designed frameworks for analysis and interpretation, with rare citations of classic theories. Second, the use of research theories is relatively dispersed, with theories covering diverse research fields. Among the 122 articles that explicitly used classic theories or models, frequently used theories include the Stimulus-Organism-Response (S-O-R) theory (6 articles), information ecology theory (4 articles), the Elaboration Likelihood Model (4 articles), information seeking theory (4 articles), and the SEIR model (4 articles), showing distinct information science and behavioral science characteristics. Notably, theories from behavioral economics and management fields such as prospect theory [51,52], uncertainty management theory [53], and social combustion theory [54] have gradually entered the purview of health communication scholars.

Regarding research methods, over 50% (792 articles) of the included samples did not explicitly use research methods in the strict scientific sense. Such papers mostly adopted narrative writing styles to express viewpoints, with somewhat insufficient logical frameworks and evidence support, consistent with research

conclusions by scholars such as Wang Xiuli [4].

In terms of specific method selection, scholars mostly used questionnaire surveys (58 articles) and structured or semi-structured interviews (58 articles) for data collection, with 4 studies using web scraping tools to collect online texts as research samples. For data processing, methods mainly included content analysis (44 articles), textual analysis (10 articles), case analysis (8 articles), grounded theory (10 articles), and virtual (or digital) ethnography (4 articles). Overall, qualitative research articles still occupy a large proportion, while the proportion of quantitative research articles has increased compared to before the pandemic [55]. Content analysis is the most commonly applied research method [56], with increasing numbers of scholars attempting to use data modeling for studies on influence mechanisms. Notably, in terms of thematic distribution of method usage, questionnaire surveys and structured/semi-structured interviews mainly focus on micro-level perspectives such as media use behaviors and effects of individuals or special groups, health information cognition, seeking, sharing, and avoidance behaviors, and health literacy evaluation. Content analysis, textual analysis, and other methods are mainly used in macro-level topics such as mass media content production, dissemination mechanisms and effects, public opinion evolution, and policy content analysis.

Theoretical Development Landscape of Domestic Health Communication Research in the Post-Pandemic Era

7. Increasingly Prominent “Communication-Oriented” Approach and New Stage of Interdisciplinary Collaboration

Whether from the perspective of discipline and journal distribution or research topic distribution, health communication research in the post-pandemic era is already filled with strong communication studies characteristics, with the “communication-oriented” approach becoming increasingly prominent, basically following the development trend of health communication over the past decade [4]. From the distribution of research hotspots, domestic health communication research has moved beyond the stage dominated by “communication effects research” to focus on topics such as mainstream media discourse system construction, social media health information dissemination, mechanisms of public health behavior formation, and rumor governance. Media social meaning research, social network research, and health narrative research have become new research hotspots.

From the perspective of disciplinary integration, early domestic health communication in journalism and communication focused on health information transmission, utilization, and behavior change, while in public health it interpreted health communication as “health education,” with insufficient interdisciplinary exchange and integration. Around 2013, health communication theory gradually generated more collision and influence with public health and sociology [55], while COVID-19 further accelerated the integration of communication studies

with clinical medicine, public health and preventive medicine, and medical management. Popularization of COVID-19-related knowledge is a crucial link in epidemic prevention and control, yet medical knowledge itself has certain barriers and must go through professional, interdisciplinary, pedagogical, and popularization stages before being accepted by the public [57]. This requires health communication scholars to possess certain medical knowledge foundations on one hand, and on the other hand demands that researchers deconstruct and disseminate complex professional knowledge from a public cognition perspective, during which public health research paradigms and health communication discourse systems have further intersected. In organizing research topics, it was also found that health communication scholars have gradually introduced governance perspectives into research on health information and health behaviors, no longer simply discussing communication mechanisms and effects but further proposing corresponding solutions for phenomena such as rumor spread and unhealthy behaviors to assist government policy-making.

8. Partial Explorations in Theoretical Construction and Application, Yet Overall Theories Remain Outdated

The study finds that although scholars have made some explorations in theoretical application or construction in recent years, especially after public relations, sociology, and other disciplines have interfaced with health communication, developing theories such as the Situational Theory of Problem Solving (STOP) [58], Cultural Sensitivity, and Culture-Centered Theory [59], overall, the theories used in health communication remain relatively outdated and require better adaptation to complex and networked information environments. Zhou Yuqiong and other scholars found in their research on theoretical application in domestic health communication that over 50% of papers directly copied or applied Western theories, with validating Western theories in the Chinese context becoming researchers' path dependency [60].

Research on domestic health communication topics needs to pay greater attention to Chinese consciousness, interpreting issues with Chinese characteristics such as rural hardcore epidemic prevention slogans, doctor-patient relationships, and government epidemic press release strategies from perspectives of national policy, social customs, or cultural traditions [60]. When conducting health communication research from social and family perspectives, concepts such as "family-state isomorphism," "differential mode of association," and "earthbound China" can serve as unique observational lenses for interpreting social phenomena.

9. Media-Centered Perspective Remains Dominant, Research Paradigms Still Relatively Singular

Whether discussing traditional or new media, mass media or social media, most research still relies on Bell's axial theory, examining media participation in social structure and social interaction [61,62]. The media-centered perspective remains

the mainstream research paradigm, manifested as mediated mass communication research, mediated interpersonal communication research, and mediated forms in health education research. Some scholars, taking doctor-patient relationship research as an example, believe that compared with overseas scholars, domestic scholars lack academic imagination in research paradigms, confining themselves to typical media-centered perspectives while rarely discussing factors such as language, codes, and even environmental design in doctor-patient communication [63]. Communication process development is not solely determined by media technology but also involves social, political, economic, and cultural factors. In health communication research, focusing only on media technology perspectives often neglects the human subjectivity dimension.

Practical Landscape of Domestic Health Communication Research in the Post-Pandemic Era

10. Close Intertwining of Health Communication with Risk Communication and Science Communication

As an unconventional risk scenario, the COVID-19 pandemic has impacted socioeconomic operation methods while also shaping, changing, and constructing people's subjective values and behavioral patterns [64]. Some scholars believe that for China, this pandemic represents an enlightenment lesson in risk society, a "coming-of-age ceremony" for China's entry into modern risk society [65]. While the risks brought by the novel coronavirus may gradually dissipate, other risks in the modernization process will continue to exist and exert influence. Health communication has become an important component of risk society governance, existing as a unique form of social governance [66]. Public risk cognition depends on media communication construction, and the existence of communication media makes it possible for the public to gradually form a path toward risk prevention and governance communities. In the included research samples, numerous studies address topics such as public health risk perception, risk communication, and risk response behaviors, with media contact and use almost invariably becoming essential elements in research and important breakthroughs for improving public risk response behaviors and enhancing risk response effectiveness. From a research object perspective, COVID-19, food safety, and health privacy security are not only important research objects in health communication but also key topics in risk communication and risk governance, requiring research and response in both normal and abnormal situations.

The intertwining of science communication and health communication is manifested in two ways. First, health science popularization activities, as an important practice of health communication, also reflect the important task of science communication in "interpreting and teaching scientific knowledge to the public." Second, a major tradition in science communication research is attributing the social psychological factors influencing public attitudes toward science and technology, focusing on how people form attitudes toward science and technology,

scientists, or specific science and technology policies [67]. Health communication research on topics such as public “vaccine hesitancy,” scientist image construction, and acceptance attitudes toward emerging medical technologies aligns with this tradition. In recent years, science communication has increasingly emphasized the Public Engagement with Science model of dialogue between the public and scientists. During the pandemic, public health information exchange in WeChat groups and social forums also demonstrated the importance of public participation in enhancing health communication effectiveness. How to further enhance public awareness of active participation in health communication may become a research hotspot in the next stage.

11. Increasingly Important Role and Status of Social Media in Health Communication

The role of social media in health communication has gradually attracted more attention. Before 2019, research in health communication still mainly focused on mass media, with relatively few papers using new media or social networks as research objects [68]. In this study, over 70 health communication research papers using social media as the research object were published between 2020-2022, with more attention and research devoted to the role mechanisms and information governance issues of social media in health information dissemination. Social media has to some extent dissolved the intermediary role of traditional gatekeepers such as media editors, showing obvious decentralized characteristics [69], making information release and transmission more free. Massive numbers of release subjects and diverse health communication content constitute a complex health discourse network. Especially during the pandemic, diverse health information release and reception subjects, complex information content, and varied information structures formed a hugely complex information network. However, the public’s ability to identify and decode increasingly complex information networks is limited, especially for health information with certain professional barriers, where identifying authenticity and judging value pose enormous challenges [68], creating space for rumor breeding and spread. The characteristics of social media—wide connectivity, ubiquity, complexity, and dynamic change—have made it an emerging research field in health communication, providing new ideas and opportunities for health governance on one hand, while on the other hand, issues such as data abuse and privacy infringement require more consideration from government and academia.

12. Rapid Expansion of Emerging Health Service Models Such as Cloud Healthcare

The social distancing brought by the COVID-19 pandemic has shifted most of the public’s information exchange activities from offline to the cloud, also bringing transformation to health service models in the medical system. Cloud medical services empowered by 5G+ internet intelligent technology have rapidly expanded, extending hospitals’ reach across distances through “internet + health-

care” to disseminate health information to broader fields without physical contact, meeting people’s medical needs. Since the pandemic began, the “health code” as a cloud healthcare medium has penetrated daily life and become an important epidemic prevention tool. The number of non-contact medical services such as remote consultations and remote surgeries has grown rapidly, with continuously improving operational procedures and service effects. Internet hospital construction has entered an acceleration period, with “online consultations” gradually becoming an important channel for medical treatment. Cloud healthcare has constructed new scenarios for medical services through its networked, intelligent, and digital characteristics, moving health communication from limited physical space to unlimited virtual space and shaping new forms of health communication [70]. Scholars have also focused in recent years on topics such as health information reporting and presentation in digital media, construction processes of online health information, online health information seeking behaviors of different populations, the impact of online information queries on doctor-patient relationships, and the impact of digital media on health promotion, discussing traditional health communication topics such as health education and health literacy enhancement under the background of new technology development. It can be said that a series of intelligent health communication practices such as cloud healthcare will become prominent characteristics of health communication research in the next stage.

Conclusion and Outlook

In summary, the COVID-19 pandemic has brought diverse topic emergence, multi-actor complex interactive communication scenarios, and interdisciplinary research perspectives to domestic health communication research, with numerous research findings concentrated in a short period, ushering domestic health communication into a new development stage. However, it must be recognized that health communication still faces problems such as insufficient research theory application and development, and relatively singular research method usage. Even when facing endless new phenomena and topics during the pandemic, breakthroughs in theory and methods remain somewhat weak. For health communication to achieve further breakthroughs in this new development stage, two shifts in research perspective and concept are needed.

First is the conceptual innovation regarding “health.” The World Health Organization defines “health” as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” [71]. Health communication should not still follow the traditional health view of “absence of disease means health” but should shift research perspectives more toward guiding individual health behaviors conducive to disease prevention, shaping healthy living environments, and fostering social concepts of “prevention first,” truly promoting the development of health practice.

Second is practicing “people-centered” health communication research. Since the implementation of COVID-19 prevention and control actions, the subjec-

tive initiative of the public as communication subjects has been greatly released and mobilized, raising health communication awareness to unprecedented new heights. The decentralized characteristics of social media have also created conditions for the public to fully exert their subjective initiative in health communication. Health communication subjects are no longer default to government or social organizations, with “individuals are the first responsible persons for health” being practiced and deepened. Health communication research needs to further emphasize respecting audience cultural differences, constructing knowledge and stories centered on the people, and building different narrative frameworks based on the diversity of public health needs, thereby greatly improving health communication effects and aligning with the concept emphasized in health management of moving from medical-centered to “people-centered health management services” [72].

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Author Contributions

Zhang Yunfan: Proposed the research topic, wrote and revised the paper.

Li Weidong: Proposed analysis ideas and revision suggestions, revised the paper.

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