

Studies in Media and Communication Vol. 12, No. 1; March 2024

ISSN: 2325-8071 E-ISSN: 2325-808X
Published by Redfame Publishing
URL: http://smc.redfame.com

# Analysis of Pandemic Reporting Framework of Mainstream New Media Based on the Reports of Typical Mainstream Media Wechat Official Account

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Received: July 17, 2023 Accepted: November 21, 2023 Online Published: December 1, 2023

doi:10.11114/smc.v12i1.6248 URL: https://doi.org/10.11114/smc.v12i1.6248

#### Abstract

Purpose: The report of "PANDEMIC" was put forward to seek more sympathetic ways of transmission and expand the focus of infected people and epidemic areas regarding district and elderly reporting topics.

Methodology: This study uses software to capture 2515 news reports about pandemic from five mainstream media WeChat official account such as People's Daily as research samples, and uses the media framework theory to analyze the news selection framework and news construction framework of mainstream media's reports on pandemic.

Findings: The People's Daily focuses on popular science topics with high user participation; "People's Network" focuses on the government's anti-epidemic trend and strengthens news commentary; Xinhuanet reports focus on the information of the epidemic fighting front line; "CCTV News" focuses on highlighting the voice of experts and the release of authoritative information; Hubei Daily highlighted the news reports on the epidemic resistance of the local government.

Originality: The deficiencies of the media in the reporting of the "PANDEMIC" are expected to provide a theoretical reference for the media reporting of future public emergencies.

Research limitations: The evaluation of the traditional media, not using more specialized indicators of the mass media, and the other is the evaluation of the new media, not tracking more retweet reading.

Social implications: The sudden PANDEMIC is a big review of the mainstream news media the mainstream news media provide strong public opinion support for the ultimate victory in the fight against pandemic.

Keywords: PANDEMIC, framework theory, new media, People's Daily, WeChat official account

## 1. Introduction

# 1.1 Background of Epidemic Information

The report of a major emergency contains the characteristics of sudden nature and unpredictable consequences, whose report content is naturally selected by the mainstream media. Such a choice is the media's report of the event, although media reports cannot influence people's views on events, they can make events a topic of heated discussion, that is, the Media agenda setting plays a decisive role in what people "Think". Therefore, the media's agenda setting can boost the effect of information dissemination (Cui Shixin, 2020). When people receive external information, they are more likely to believe what they see and hear for the first time. The advantages of network media, such as the rapidity, make it possible to publish news whenever and wherever unexpected events occur. Network new media not only speeds up the timely effectiveness of agenda setting, but also greatly reduces the "Time lag" of producing results. The agenda setting subjects which transmit info to the public include traditional media, new media, even the feedback of the audience. In the context of new media, the diversity and interactivity of agenda-setting subjects are enhanced, and individual issues are more easily transformed into public issues (Chen Xingshu, 2020). The Internet will indeed bring about some changes in the setting of the news media agenda, but for now, these changes are only to some extent, changes in the details, not a change in the nature of the agenda (Shen Zhengfu, 2020). During the epidemic period of COVID-19, the news media played an important role in transmitting information, guiding public opinion. New Media, such as Wechat,

Weibo and Douyin, regarded as mass communication, have become more influential than traditional media because of their fast spread speed, wide coverage and strong interactivity. One of the most important factors is the function of agenda-setting (Sun Caiqin, 2010).

The research on pandemic in the field of news communication mainly falls into three categories: first, how the media do a good job in reporting pandemic. Cui Shixin (2020), director of the Research Department of the People's Daily, described the main principles and guiding ideology of pandemic epidemic report in the People's Daily in combination with specific examples (Shang Bao, 2020). The study found that pandemic was a major public emergency. News reports should focus on information and openness, respond to concerns, slow release guidance, and boost morale. The news media should realize the transformation from information control to information disclosure and information guidance. The second is the public opinion research on the pandemic. Chen Xingshu et al. (2020) used web crawler technology and machine learning technology to analyse more than 60000 Sina Weibo blog posts and 15000 popular microblog comments, and visually displayed the evolution characteristics of the pandemic (Wang Peng, 2020). On the whole, the public opinion was more positive than negative, and positive than negative. Third, public opinion response to pandemic.

It can be seen from the existing studies that although the number of studies on the pandemic (hereinafter referred to as the epidemic) is very small, it has become the focus and focus of attention of scholars, but there are still some shortcomings in the existing studies: 1. The emphasis on news reporting and public opinion guidance is not enough theoretical and targeted; 2. Focus on macro level research, and pay less attention to micro level research.

# 1.2 Hypotheses

From the perspective of media framework theory, this paper selects the mainstream media's reports on pandemic epidemic on the WeChat official account as research materials to explore how the mainstream media construct the topic of "PANDEMIC" on the WeChat platform, what kind of reporting framework has been formed in the reports, and the reports between different media. What are the similarities and differences between report frames? The deficiencies of the media in the reporting of the "PANDEMIC" are expected to provide a theoretical reference for the media reporting of future public emergencies.

## 1.3 Research Questions

Q1:Does the People's Daily has a positive effect on resolving public anxiety?

Q2: Does the People's Daily Online help government transfer information?

O3:Does the "Xinhuanet" consider the needs of all different regions and fields?

Q4:Does the "CCTV News" focus on the information provided by expert?

Q5:Does "Hubei Daily" offer scientific information reports in epidemic prevention based on facts?

# 2. Materials and Methods

# 2.1 Sample Selection

This paper takes the frame theory as the research perspective. Gitlin (1980) first introduced framework analysis into media research and proposed that the framework is "the criteria used for selection, emphasis and performance on what exists, what happens and what is the significance" (Li Yue, 2019). For the framework analysis of media coverage, some scholars have summarized it into two categories, namely, horizontal research and vertical research. Horizontal research is a comparative study of media coverage of an event in different countries, and vertical research is a study of the evolution of the news framework according to the occurrence and development order of news events (Merchant RM, 2011). This research draws on the vertical research of Sun Caiqin, that is, from the perspective of news selection, news construction and user effect, to conduct a framework study (Garfin DR, 2020).

## 2.2 Sampling Procedures

After the participants were randomly selected, they were asked to answer a questionnaire. The preparation of the questionnaire for this study will also be developed by a team of professionals. The questions in the question were designed using a 7-point Likert scale (1=strongly disagree, 2=strongly disagree, 3=disagree, 4=somewhat agree, 5=agree, 6=strongly agree, 7=strongly agree). Design respondents will participate in 2 questionnaires at a time. The first questionnaire showed only the questions, and the respondents were asked to answer the questions. The second questionnaire, which added the corresponding environmental news articles, asked participants to answer the same questions after reading the articles.

This article selects the WeChat official account of four central level media with the greatest influence in China, including People's Daily, People's Daily, Xinhuanet and CCTV News, as well as Hubei Daily, one of the local media in the hardest hit areas of the epidemic. The above media are all domestic mainstream media with the largest amount of

news reports, the most influential and the most credibility in the epidemic prevention and control.

The media first reported the "PANDEMIC" on January 19, 2020. Therefore, we selected the news reports published (original, forwarded) on the WeChat official account platform of five media within 30 days from January 19 to February 17. Through the Qingbo big data platform, a total of 3200 news reports were captured, and then the software removed 400 news reports, and manually screened 285 reports that did not belong to the "PANDEMIC". Finally, 2515 valid samples were obtained, including 502 in the People's Daily, 470 in the People's Network, 321 in the Xinhua Network, 551 in the CCTV News, and 671 in the Hubei Daily.

## 2.3 Research Design

The framework of news selection includes news sources, reporting regions and reporting fields; The framework of news construction includes the changing trend of reporting volume, the word frequency of news headlines, the length of news headlines, and the number of reports; User effects include reading number and watching number.

## News Source

It can be seen from Table I that the first source of news reports on the epidemic situation is the news media, which has issued 150 articles, accounting for 59.8% of the total number of articles. This situation shows that during the epidemic resistance period, the news media are the main voice and publisher of the epidemic situation and related information; The second source of information is the official organization, which has issued 704 articles (306 epidemic notifications), accounting for 28.0% of the total number of documents. This situation shows that when there is no specific drug at the beginning of the epidemic, as Bai Yansong said, the government organization is the best medicine and anti-epidemic means to disclose the information of the epidemic; We media is the third source of information, mainly based on popular science information. The account cited more is Doctor Clove (13 articles).

Table 1. Statistics of News Sources

News source	WeChat official account					
	People's Daily	People's Network	Xinhuanet	CCTV news	hubei daily	
news media	265	308	224	358	348	1503
Official organizations	127	121	80	132	244	704
We media	18	38	0	47	3	106
Others	91	2	17	14	76	200
hospital	1	1	0	0	0	2
total	502	470	321	551	671	2515

## News coverage area

According to the statistical analysis of the samples of news reports, the regions of news reports are mainly divided into four categories: Hubei, the whole country, foreign countries, and others; International news reports on the PANDEMIC epidemic situation and epidemic resistance in foreign countries; Others refer to news reports that do not specify specific regions.

Table 2. News coverage area

Coverage area	WeChat official account					
	People's Daily	People's Network	Xinhuanet	CCTV news	hubei daily	
Hubei	108	113	85	187	438	931
Non-Hubei	319	317	206	306	209	1357
abroad	0	3	1	4	0	8
Others	75	37	29	54	24	219
total	502	470	321	551	671	2515

It can be seen from Table 2 that: (1) the central level media focus on the epidemic prevention and control situation of PANDEMIC epidemic in all parts of the country (non Wuhan area); (2) The situation of PANDEMIC in Hubei has

become the focus of all media attention. Among them, People's Daily, People's Daily, Xinhuanet, CCTV News and other media accounted for 21.5%, 24.0%, 26.5% and 33.9% of the total number of news reports on Hubei, respectively. "CCTV News" is the central media that pays the highest attention to the epidemic situation in Hubei. At the same time, Hubei Daily, as the party media in Hubei, reported 65.3% of the local epidemic prevention and control, but they were not completely limited to localized news reports.

In addition, through the regional analysis of news reports in regions except Hubei, it was found that the media reported Beijing, Zhejiang, Guangdong, Shanghai and Jiangsu in the top five (see Figure 1), indicating that the media paid more attention to the epidemic situation in Beijing, Shanghai and Guangzhou, but during this period, the epidemic situation in Henan, Shandong and Chongqing was still serious. Although the formation of the news framework is affected by the external environment, emphasizing regional balance in reporting content is an important principle to improve the core competitiveness of the media and meet the information needs of the audience (Zhao Yao, 2020). To some extent, reports during the epidemic violated the principle of balance.

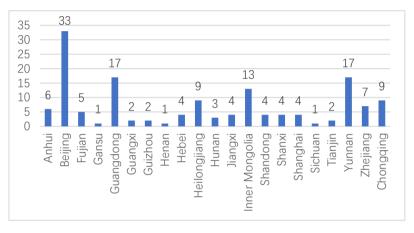


Figure 1. Reported area (except Hubei province)

# Reporting area

The media, as the main builder of the news framework, focuses on the areas that affect the audience's understanding of the epidemic situation. Based on the analysis of sample news reports, the reporting areas are divided into ten categories. See Table 3 for statistical results. The dynamic report of the epidemic situation is the most important link of the information disclosure of the epidemic situation, accounting for 27.2% of the total, which is the focus of media reports. The most important is the notification of the epidemic situation, accounting for 14.9% of the total, followed by 6.1% of the impact of the epidemic situation; The media rarely reported on the issue of terrorist appeals for virus transmission and death cases. There were only two reports of death cases, and the same media (Hubei Daily) reported the same case (the death of Dr. Liang Wudong); "Xinhuanet" paid the least attention to the epidemic situation in all media, with only 67 articles, accounting for 20.9% of its total reports, lower than the average.

Table 3. Reported fields

Coverage area				Iedia name			total
		People's	People's	Xinhuanet	CCTV	hubei	
		Daily	Network		news	daily	
	Epidemic notification	87	62	38	98	90	375
	Epidemic impact	13	47	22	36	36	154
Epidemic situation	Plague transmission	42	14	5	22	12	95
	Cured cases	3	20	2	12	22	59
	Cases of deaths	0	0	0	0	2	2
	Subtotal	145	143	67	168	162	685
Social prevention and	Social epidemic prevention	3	6	6	5	3	23
control	Social donation	1	4	6	2	3	16
	Anti-epidemic Front	17	27	21	46	18	129
	Subtotal	21	37	33	53	24	168
Scientific epidemic	Popular science information	80	22	28	55	69	254
prevention	Scientific Research Trends	3	4	4	0	14	25
•	Expert voice	13	7	13	19	26	78
	Subtotal	96	33	45	74	109	357
Ideology	Positive Energy News	56	39	29	82	26	232
<b></b>	Charitable donation	10	8	0	7	5	30
	Media initiatives	38	12	29	19	7	105
	Subtotal	104	59	58	108	38	367
Government	Government prevention and	11	19	18	21	103	172
developments	control						
•	Authoritative release	27	30	11	21	55	144
	Medical assistance	27	41	33	40	61	202
	Leader report	10	3	6	8	7	34
	Subtotal	75	93	68	90	226	552
International news	International voice	6	9	5	4	5	29
	International developments	0	0	0	2	0	2
	Subtotal	6	9	5	6	5	31
Others	Rumour dispelling	17	9	3	8	27	64
	information	12	27	12	1.2		107
	Violation of laws, regulations	12	37	13	12	51	125
	and disciplines	2.5		•		• • • • • • • • • • • • • • • • • • • •	
	News commentary	26	50	29	32	29	166
	Subtotal	55	96	45	52	107	355
	total	502	470	321	551	671	2515

# 3. Results

## Report volume and its change trend

It can be seen from Figure 2 that: (1) The trend of the coverage of the five media is basically the same, showing a gradual increase and a steady development after reaching the peak; (2) The central level media had a collective peak from January 24 to January 26. During this period, Wuhan announced the "closure of the city", the CPC Central Committee established a leading group to deal with the epidemic, and sent medical rescue teams to Wuhan. A series of measures became the focus of attention of the people and the media all over the country; (3) There are two peaks in the news reports of "People's Daily" and "Hubei Daily". In addition to the first peak from January 25 to January 26, February 2 is also a peak. News closely related to the local fight against the epidemic in Hubei, such as air force support, the handover of Huoshen Mountain Hospital, and staff receiving protective masks, will affect the construction of the news framework.

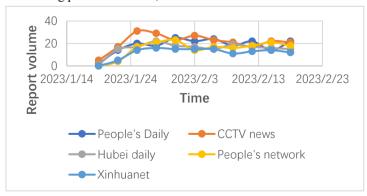


Figure 2. Report volume and change trend

# News title word frequency

Keyword can be used not only to identify and analyze the research hotspot of disciplines, but also to identify and find the development trend of news events and public concerns in news texts. This paper refers to the word frequency method used by Shang Bao (2020), that is, ROST-CM 6-word segmentation function is used to automatically segment 2525 news report titles and texts. See Table 4 for word frequency statistics.

Table 4. High frequency words of news report titles

Serial No	key word	word frequency	Serial No	key word	word frequency
1	Wuhan	423	11	case	135
2	diagnosis	388	12	patient	115
3	pneumonia	320	13	Infected	110
4	Viruses	302	14	Mask	105
5	epidemic situation	298	15	academician	90
6	Hubei	274	16	spread	88
7	prevention and control	234	17	quarantine	87
8	newly added	219	18	Health Commission	87
9	new type	163	19	Medical care	65
10	death	143	20	urgent	57

From Table 4, high-frequency words are complex and diverse, covering all reporting areas. The top 20 keywords appeared 3703 times, with an average of 185.15 times per word. The media constructed a news framework from different perspectives, such as academicians' answers to reporters' questions, medical and nursing news, daily epidemic news, military reinforcements, and prevention and control news, to meet the concerns of different audiences (users) about the epidemic, so that the public can understand the epidemic in a timely and comprehensive manner.

#### News headline length

It can be seen from Table V: (1) There are 180 titles between 1-10 characters, accounting for 7.16%, 1089 titles between 11-20 characters, 43.3%, 1121 titles between 21-30 characters, 44.57%, 122 titles between 31-40 characters, 4.85%, and 3 titles between 41-50 characters, 0.12%; (2) The title of "CCTV News" is more detailed than that of other media, including three long titles with more than 40 words; (3) The title of the People's Daily is more concise than that of other media. There are three 2-word titles, namely, "Hand!" "Face!" "War!", Simple and comprehensive, more suspensive; (4) Generally speaking, it is better that the title is no more than 20 words, but the news reports of "CCTV News" and "Hubei Daily" that have more than 20 words in the title have exceeded 50% of the total coverage, and the other three media have no less than 33%. This phenomenon shows that the new media platform breaks through the dilemma of traditional media layout and pays more attention to the integrity of the title to the content expression.

Table V. Header Length Statistics

Title Length		Media name					
	People's Daily	People's Network	Xinhuanet	CCTV news	hubei daily	<u>-</u> '	
1-10	53	39	40	25	23	180	
11-20	219	244	175	165	286	1089	
21-30	220	181	99	283	338	1121	
31-40	10	6	7	75	24	122	
41-50	0	0	0	3	0	3	
total	502	470	321	551	671	2515	

# Report Number

The report number is the order of a single article in a push. The higher the order, the stronger the importance. See Table 6 for the number of statistical sample reports.

Table 6. Statistics of Report Number

Report number		Media name					
	People's Daily	People's Network	Xinhuanet	CCTV news	hubei daily		
1	335	225	189	345	241	1335	
2	163	180	128	182	223	876	
3	4	65	4	24	156	253	
4	0	0	0	0	44	44	
5	0	0	0	0	7	7	
total	502	470	321	551	671	2515	

It can be seen from Table 6 that (1) at most one push by the central level media contains three messages, Hubei Daily has more reports, and at most one push contains five messages; (2) The number of PANDEMIC reports in the media

accounts for 53.1%, 34.8%, 10.1%, 1.7% and 0.28% respectively, which indicates that the media has given absolute high exposure and attention to PANDEMIC epidemic, almost occupying the headlines of the media during this period; (3) Among the reports of Hubei Daily, Article 1 and Article 2 respectively account for 35.9% and 33.2% of the total reports, which is more balanced. In combination with the news sources, the government is the main source of headlines, accounting for 51%. The party newspaper plays a leading role in public opinion. The main source of the second article is the media, accounting for 53%, which gives more play to the media's own initiative in reporting.

Reading number analysis

Table 7. Reading Volume Statistics

Reading volume	Media name					
	People's Daily	People's Network	Xinhuanet	CCTV news	hubei daily	
100000 yuan+	502	371	207	547	142	1769
Less than 100000	0	99	114	4	529	746
100000+percentage	100%	78.9%	64.5%	99.3%	21.2%	70.3%
total	502	470	321	551	671	2515

It can be seen from Table 7 that (1) 70.3% of the news reports of the five media have been read by 100000+ on the whole, which indicates that these reports are generally of high quality and have been recognized by the audience; (2) The PANDEMIC reported by the People's Daily was 100000+, accounting for 100% of the total, followed by "CCTV News" with 100000+, accounting for 99.3%, "People's Daily" with 100000+, accounting for 78.9%, "Xinhuanet" with 64.5%, and the lowest was "Hubei Daily" with 100000+, accounting for 21.2%. In a word, from the reading volume and the proportion of 100000+, People's Daily and CCTV News have greater influence. As the local mainstream media, Hubei Daily has a certain gap in influence compared with the central level media.

Viewing number analysis

Table 8. Reading statistics

Viewing number	Media name				
	People's Daily	People's Network	Xinhuanet	CCTV news	hubei daily
Average number in view	37033	2090	1426	6134	273
Highest number in view	10 w+	10 w+	39008	53344	24618
Lowest number in view	3228	121	97	469	3
100,000+quantity	44	1	0	0	0

WeChat 7.0 launched the "watching" function, which is a favorite upgrade Version, users can see the recommended tweets by clicking "watching", "reading number" is an important indicator of the influence of WeChat official account. According to Table 8 Know:

(1) The People's Daily has the largest number of readers, including 100000+

It is also the largest among the five major media, from which we can deduce that its propagation index is also the largest High;

(2) The spread of Hubei Daily needs to be improved in this epidemic,

The number of articles being read is only 1/135 of that of the People's Daily, of which the most highly praised report. For the "President of Wuhan Jinyintan Hospital: terminally ill, wife" released on January 28. Zi was infected and fought at the forefront of the epidemic for more than 30 days. "This report is from Wuhan. The local positive energy news reports that in the critical period of PANDEMIC epidemic prevention and control. Beijing Daily is still of great significance in reporting the local epidemic situation;

(3) Although the "CCTV News" has read a lot, there is no news report. The number of people watching reached 100000+.

Publication of the transmission effects of case-activity trajectories

From January 20 to March 19,214 articles related to new coronary pneumonia were pushed through the wechat public account "Local Health and Health Commission". The articles were divided into six categories, with the Activity track having the highest average number of times of reading and the highest number of people reading each article, 706,000 times and 539,000 times respectively, with an opening rate of 20.56%, ranking first among all types. See Table 9.

Table 9. Reading of articles about new coronary pneumonia on wechat

Classificati on	Number of chapters	Number of readings (million)	Average number of readings (m)	Number of readers (m)	Average number of readers per article (m)	Open rate (%)
Active	43	3034	70.6	2 316.9	53.9	20.6
Notification	72	2094	29.1	1 691.4	23.5	8.9
Policy	21	419.7	19.9	359.0	17.1	6.5
	24	369.5	15.4	326.0	13.6	5.1
Discharge	29	434.4	15.0	375.1	12.9	5.0
First-line	25	295.2	11.8	263.7	10.5	3.9
Total	214	6 984.4	25.4	5 625.3	20.5	8.0

News Selection Framework

In terms of the choice of news sources, the five media mainly focus on media interviews and official sources. The People's Daily and CCTV News also give consideration to the reprints of other We media, but all five media ignore the public voice and hospital information sources to some extent; In terms of citations, the five media are mainly direct and non-citations; In terms of reporting areas, the central level media took Hubei and other regions of the country into consideration, highlighting the national perspective. Only 31% of the news reports of Hubei Daily focused on non-Hubei regions, which helped to disperse and alleviate the anxiety of Hubei people; In the field of reporting, the five media pay more attention to the epidemic situation and government developments, but each has its own emphasis. The People's Daily and Xinhuanet are the focus of reporting in the ideological field, and their reports are unique in terms of stabilizing people's minds, boosting confidence and enhancing determination. The People's Network pays more attention to international news reports, highlighting an international vision. The CCTV News focuses on social prevention and control reports, boosting public confidence, Hubei Daily focuses on local anti-epidemic reports and plays a role in spreading government notices.

# News construction framework

In terms of reporting volume, Hubei Daily has the largest number of reports and Xinhua has the smallest number. With the development of the "PANDEMIC", the overall reporting volume shows a trend from less to more and gradually stable, and fluctuates to a certain extent due to the delivery of Huoshenshan Hospital, air force support and other news events; In terms of the formulation of news headlines, "Wuhan", "confirmed", "pneumonia", "virus" and "epidemic" are the top five keywords in terms of frequency. The number of words in the headlines is mainly 11-30 words. People 's Daily prefers short headlines with less than 5 words, while "CCTV News" prefers long headlines with more than 40 words; On the title number, five media reported that "PANDEMIC. More than half of the headlines of "epidemic situation" were used, of which the headlines of People's Daily even accounted for two-thirds; In terms of audience feedback, there is a certain gap in the reading amount of each media. The central media reported 100000+ reading amount of more than 60%, the People's Daily and CCTV News reported 100000+ reading amount of almost 100%, while the local media reported 100000+ reading amount of only 21.2%. In terms of viewing amount, the People 's Daily reported 44 reports with more than 100000, far ahead of other media.

#### 4. Discussion

Table 10. Previous studies of COVID-19 media reports

Author/year	Findings
Cui Shixin, 2020	The Media agenda setting plays a decisive role in what people "Think". The media's agenda setting can boost the effect of information dissemination in the report of PANDEMIC in People's Daily.
Sun Caiqin, 2021	During the epidemic period of COVID-19, the news media played an important role in transmitting information, guiding public opinion.
Shang Bao, 2020	Pandemic was a major public emergency. News reports should focus on information and openness, respond to concerns, slow release guidance, and boost morale.
Chen Xingshu, 2020	In the context of new media in COVID-19 report, the diversity and interactivity of agenda-setting subjects are enhanced, and individual issues are more easily transformed into public issues.
Shen Zhengfu, 2020	One of the most important factors is the function of agenda-setting,makes Wechat, Weibo and Douyin have become more influential than traditional media because of their fast spread speed, wide coverage and strong interactivity.

It can be seen from the previous studies within five years in table 10 that although the number of studies on the

pandemic (hereinafter referred to as the epidemic) is very small, it has become the focus and focus of attention of scholars, but there are still some shortcomings in the existing studies: 1. The emphasis on news reporting and public opinion guidance is not enough theoretical and targeted; 2. Focus on macro level research, and pay less attention to micro level research. In the report of the Covid-19 epidemic, the lack of media coverage and the way to improve it will make more strategic contributions to the media's coverage of public health emergencies in the future.

This study discusses how news media should report on public health emergencies in the context of the current network development environment, including the complementarity of content reported by different media backgrounds, and the use of digital technology to extend the boundaries of media reporting:

- (1) In the selection of news sources, the five media mainly focus on media interviews and official sources. The three "People's Daily", "People's Daily" and "CCTV News" also take into account the reprints of other self-media, but all five media. There is a certain neglect of public voices and hospital information sources; in terms of citations, the five media mainly use direct citations and no citations; in terms of reporting areas, the central-level media takes into account Hubei and other parts of the country, showing a national vision, "Hubei". Only 31% of the daily news reports focus on non-Hubei areas, which helps to disperse and ease the anxiety of Hubei people; in the field of reporting, the five media pay more attention to the epidemic situation and government dynamics, but they have their own priorities;
- (2) In terms of reporting volume, "Hubei Daily" reported the most, and "Xinhua Net" reported the least. The overall reporting volume showed a trend from less to more and gradually stabilized with the development of the "Covid-19 epidemic", and was affected by The impact of news events such as the delivery of Huoshenshan Hospital and Air Force support fluctuates to a certain extent; in the formulation of news headlines, "Wuhan", "diagnosed", "pneumonia", "virus", and "epidemic" are the key to the top five occurrence frequencies The number of words in the title is mainly between 11 and 30 words. Among them, People's Daily prefers to use short titles of less than 5 words, and "CCTV News" prefers to use long titles of more than 40 words; on the title serial number, five The media used more than half of the headlines in the "Covid-19 epidemic", and the headlines of "People's Daily" accounted for even two-thirds; in terms of audience feedback, there was a certain gap between various media in terms of reading volume, and central-level media 10 Reports with 10,000+ views are all over 60%, and the 100,000+ views of People's Daily and CCTV News are almost 100%, while the reports of local media with 100,000+ views are only 21.2%. In terms of numbers, People 's Daily has 44 reports with more than 100,000 views, far ahead of other media. People's Daily's news reports express people-friendly, high user activity, which is the most popular among the "Covid-19 epidemic" reports. strongest media.

#### 5. Conclusion

Through the above analysis, it is found that the epidemic situation and public opinion guidance are the common focus of the five media. In addition, they have their own characteristics:

- (1) The People's Daily is relatively balanced as a whole, showing a national vision, high-quality news reports and popular science Information and positive news have a positive effect on resolving public anxiety and fear, and users are highly concerned, but the media tends to be "elitist", and reports on hospital epidemic prevention trends are insufficient;
- (2) "People's Daily Online" highlights government trends and epidemics;
- (3) "Xinhuanet" pays attention to the balance of reports, and takes into account the needs of different regions and fields. In reporting, the information on the frontline of the fight against the epidemic is more concerned, but the overall number is relatively insufficient;
- (4) "CCTV News" has the largest number of original news, highlighting the dynamic reports on the frontline of the fight against the epidemic, focusing on the release of expert voices and authoritative information, while taking into account the warm news;
- (5) "Hubei Daily" takes into account the epidemic situation in and outside the province as a whole, focusing on the epidemic prevention dynamics and scientific epidemic prevention of the local government in Hubei, as well as local people's help-seeking information reports.

This study also has limitations, one is the evaluation of the traditional media, not using more specialized indicators of the mass media, and the other is the evaluation of the new media, not tracking more retweet reading. Since the focus of this study is on the application of the mass communication theory, more specialized evaluation of communication effects needs to be studied further. It is worth noting that agenda-setting is one of the important theories in communication science, and the derived methods are also emphasized, including the micro-agenda theory proposed by scholars in the agenda-setting of new media. The application of this theory and method in public health emergencies has also been reported, which is worth further discussion.

## Acknowledgements

Author Contributions: Conceptualization, Lyu Lin, Lily Suriani Binti Mohd Arif and Ruzanna Binti Shahrin; Methodology, Lyu Lin; Investigation, Lyu Lin; Resources, Lyu Lin; Writing—original draft preparation, Lyu Lin; Writing—review and editing, Lily Suriani Binti Mohd Arif and Ruzanna Binti Shahrin; Supervision, Lily Suriani Binti Mohd Arif; Project administration, Lyu Lin, Lily Suriani Binti Mohd Arif, Nana Zhang.

## **Authors contributions**

Not applicable.

## **Funding**

Not applicable.

## **Competing interests**

Not applicable.

#### **Informed consent**

Obtained.

## **Ethics approval**

The Publication Ethics Committee of the Redfame Publishing.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

## Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

#### Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

# Data sharing statement

No additional data are available.

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