

# Analysis of the Dissemination of Health Information in the Context of Mass Communication

Zihao Wang

School of Beijing Institute of Graphic Communication, Beijing, China

\* Corresponding Author Email: 2224280517@henu.edu.cn

**Abstract.** At the beginning of the complete opening of the epidemic, official or unofficial drug information also spread rapidly to people's lives due to the large-scale spread of COVID-19. The continuous occurrence of acute liver injury cases caused by improper and disorderly drug use is because the health information is too concise, important information is omitted, or the public is careless in searching and screening the information. After seeing the news of acute liver injury cases caused by various reasons after the release of several epidemic cases, the author decided to investigate and study the root cause. The specific research refers to the theory of previous literature, studies the characteristics of media communication information, introduces the situation of health information in mass communication, and analyzes the reasons. According to the research, there are two reasons. One is the deviation of the information disseminated by the media, and the other is the poor public health information literacy. In order to reduce the recurrence of such acute liver injury cases, it is necessary for the government to strengthen management, the media to stick to their responsibilities, and the masses to improve their health information literacy.

**Keywords:** Health information dissemination; risk perception theory; COVID-19.

## 1. Introduction

Health is the pursuit of everyone, and health information refers to all knowledge, technology, skills, concepts and behaviors related to human health produced, transmitted, and shared by both parties that people need to obtain in the process of pursuing and maintaining health. With the continuous development of the economy, the quality of life of the people has been improved, and people's health awareness has also been strengthened. In December 2019, COVID-19 broke out, and people panicked about this highly infectious disease. However, with the timely release of national policies and the correct response of all departments, the epidemic has been effectively controlled. The epidemic has been strictly controlled for three years, and the virus is also mutating, gradually from infecting the lungs, causing severe pneumonia, to now infecting the upper respiratory tract. The symptoms are relatively reduced, and the country is gradually opening up, trying to coexist with the virus. In December 2022, the epidemic fully opened, and the state will no longer control COVID-19-infected people. However, the virus has not been completely eliminated, and it is still threatening people's health. Although most of the infected people have no symptoms or mild symptoms, they are highly infectious and have a fast onset. The symptoms, such as fever, cough, and sore throat for about a week, can still cause people's panic. In order to resist COVID-19, both traditional media and new media are spreading health information. Official and unofficial information is rapidly pouring into people's lives. Many people are uncertain about the way to deal with medical drugs with different opinions.

New media develops rapidly and has a large user base, every user has become the publisher and disseminator of news. However, compared with traditional media, the content review mechanism of the new media platform is not strict. This will lead to disintermediation in the process of information dissemination on the new media platform [1]. The masses can release any information at any time. This information will be displayed on the platform without qualified review, and other people will receive this information and even carry out secondary dissemination. The vast information base and convenient means of communication may lead to the rapid spread of false information. Pseudoscientific information and rumors cannot be effectively stopped in a timely manner, which

will mislead the public and affect their health. In order to reduce the harm caused by false information, it is particularly important to study the source and transmission method of information. There should be many barriers on the source and transmission way of false information to reduce its transmission. This paper will focus on the transmission of health information and people's health information literacy.

## 2. Current State of Media Communication

Before the development of the Internet, the primary sources of people's access to health information were hospitals and traditional media, including newspapers, magazines, radio and television. The disseminators of information are mainly official media or experts.

Due to the rapid development of network media, the channels for people to obtain health information are not limited to hospitals and traditional media. WeChat is the most popular social service platform in China, with more than 1.3 billion monthly active users, and has become a widely used information exchange tool. There is a special module called "Official Account" in WeChat, which can be a platform operated by organizations, groups, or individuals. In people's lives, the role of the WeChat official account is getting bigger and bigger. Anyone can post information about an account. Similarly, on new media, short video platforms also dominate. At present, mainstream short video platforms have more than 850 million active users every month, up to 900 million. All users can post articles, photos, videos, etc. on the website to express their views and opinions. Microblog is an earlier emerging social media, and it is also the most important information transmission channel on the Internet. The monthly active users of Weibo can reach 570 million, 94% of which are mobile users. The rapid development of network media has changed the way of transmitting health information and the way of obtaining opinions.

The development of online media also provides opportunities for fake news. Rumors accounted for more than a third of the 100 trending topics in China in 2012[2]. According to Zhang Taofu's data, the themes and proportions of these rumors are: culture, education, contemporary politics, society, sports, economy, environment, law [3]. Yang Dan's survey results show that fake news covers a wide range of fields, including social and people's livelihood, public security, policy and legal systems, and the international situation; among them, false information about social and people's livelihood accounted for 41%, and those about public safety False information accounted for 35% [4]. Therefore, false news must be effectively suppressed.

## 3. Literature Review

### 3.1. Foreign Research Status

The research on health information searching behavior can be traced back to the 1980s. E.R. Lenz first proposed the concept of health information searching behavior (HISB) in 1984 and is the most representative. E.R. Lenz analyzed the concept of information search within the framework of the six-step process model, determined the interrelated dimensions of the information search process, and assumed the impact on cognitive and behavioral results. It is believed that health information search behavior is a series of information behaviors that change according to the two dimensions of "degree" and "method" [5]. Since then, the in-depth application of the Internet in the field of health information has prompted scholars in relevant fields to pay extensive attention to the user's health information search behavior in the network environment.

As for health literacy, generally speaking, the lower the level of education, the weaker the ability to read and understand health information, and the occupational and social status indirectly related to the level of education will also further affect the access to health information resources [6,7]. Niemer et al. believe that gender also affects the access to health information [8]. Women are more active and pay more attention to health information than men.

With regard to health services, Baker et al. In the United States, the vast majority of people seek health information on the Internet, and some people still obtain health information through books, magazines and other print resources, and about 6% of Americans regard public libraries as the most important and valuable source of health information [9,10].

### 3.2. Domestic Research Status

Compared with foreign scholars' research on health information communication, China's health communication research started late. Through literature review, the process of China's health information dissemination research can be summarized into three stages:

In the first stage, "communication scholars", mainly "public health research", were absent. Wilbur Schram's visit to China in 1982 directly led to the development of communication studies in China. In the following decades, China's communication studies have shown the distinctive characteristics of learning from western countries. In terms of research paradigm, cognition, attitude and behavior constitute the basic path of research, and the research object is also limited to the scope of health education and medical care. Overall, the research at this stage still presents the characteristics of "health education" dominated by public health rather than "health communication".

The second stage is the stage dominated by communication scholars, which is dominated by "mass communication effect research". In 2009, the major breakthrough of Zhang Zili's "Health Communication - the blending of body and mind" was to explore some important issues in the field of research and practice of health communication from different levels, such as interpersonal communication and mass communication, and "communication-oriented" health communication research began to emerge. In terms of the composition of researchers, communication scholars have changed from "absent" to "dominant". However, from the perspective of the institutional sources of the authors, the interaction and cooperation between disciplines are still less.

The third stage is an interdisciplinary cooperation stage focusing on "social media and data mining research". No matter at the national strategic level or in the context of media environment change, China's health communication research has entered the third stage of the urgent need for cross-field cooperation between public health and mass communication, computational communication and other fields. The academic task at this stage is to analyze the popularization of health knowledge in the media, including social media, the dialogue on health within the family, community and society, and to find out the challenges and opportunities faced by health communication in the process of improving the health literacy of the whole people. Deng Shengli has focused on studying the impact of information technology, media and other factors on public health information search and other behaviors since 2016, and also focused on health information quality evaluation indicators and evaluation tools [11]. Han Gang and Qin Meiting focused on health information communication, including the health information characteristics and information diffusion mechanism of social media, mass media and other media. Lu Jianhua earlier tried to build a health management system suitable for China's development from the perspective of information management [12]. Kong Yan and Yao Hongwen focus on research on health literacy and its promotion strategies [13,14].

## 4. The Ways for People to Obtain Health Information

People will obtain or collect relevant health information daily or when ill. Their access to information is mainly through traditional media and new media. The way of word of mouth is also one of the main ways, but it is similar to the situation of new media and will not be described here separately. Instead, this article will focus on the analysis of traditional media and new media.

The traditional media represented by newspapers, radio, and television are the authoritative channels for people to obtain information. After being checked and filtered at all levels, the traditional media presents information to the people through news reports or programs. The audience has no right to choose information, and the transmission mode is one-way.

The new media is represented by digital technology. Compared with traditional media, its most prominent feature is breaking the boundaries between media, regions, administrations, and even between the communicator and the receiver to make information dissemination more accessible. Publishers can send what they see and hear anytime and anywhere. The audience can also choose the content they want to see and communicate with the publisher or others.

## **5. Characteristics of Information Dissemination by Media**

The information publishers of traditional media are mainly officials or experts, while the information publishers of new media are not limited to officials or experts. The masses can also forward or publish their information. The large number of people has led to differences between the information released by the new media platform and the information released by the traditional media. In the following part, the comparison between the two ways will be analyzed.

### **5.1. Communication Content**

New media has a large number of participants and a wide range of information. The traditional media has a longer time history and more information. Therefore, in terms of quantity, this is not what people need most. In terms of quality, traditional media has great advantages. Its professionalism and accuracy are hard to replace in new media. Therefore, for ordinary people, traditional media is more authoritative and credible.

### **5.2. Communication Range**

The delivery range of a message depends on its audience and the size of that audience. The proliferation of new media mainly refers to its proliferation on the Internet. To receive news online, you need to use related electronic products such as computers and mobile phones. Of all the traditional media, television is the biggest communicator. Besides the Internet, watching TV is the most common way of obtaining information. Traditional media such as newspapers and magazines have obvious regional and relatively stable audiences. Moreover, from the first draft of the manuscript, to the editor-in-chief, to typesetting, to production; until it is officially released, it is a long process. Although it took a long time, the creators are still hard at work and have produced high-quality work. The audience attracted in this way gradually becomes a loyal audience. Make full use of the advantages of traditional media. Regardless of the new or old media, the audience cannot be separated.

### **5.3. Communication Timeliness**

News reporting is a time effect. Whether it is new media or traditional media, it is necessary to win the audience's favor with time-sensitive news content. Compared with traditional media, new media will have stronger timeliness. It is based on the Internet, takes the Internet as the carrier, and uses the Internet tools developed by the Internet to disseminate information to the outside world. Users can record information in real time, spread the information, and then transmit the information to the public, and the speed of information diffusion is much faster than traditional media. This has led to a tendency to obtain information through new media.

### **5.4. Communication Authority**

Traditional media has formed a series of supporting systems during its development. In addition, on a global scale, most of the traditional media are controlled by the state, including TV stations, radio stations and newspapers. They have strict requirements on the filtering and screening of news, so the news they publish is relatively real. The new media provides the audience with an open platform without communication barriers, enabling both parties to carry out two-way transmission of information. Listeners can accept and send messages. However, at present, the quality of my country's new media practitioners is still very unstable, and the relevant systems are not perfect. In such an environment, the benefits of the new medium turned into disadvantages. The dissemination of various

rumors and false news not only caused great disturbance to the daily life of the people, but also greatly reduced the people's trust in the new media.

## **6. Problems in Health Information Dissemination**

Experts confirmed that COVID-19 infection could heal itself, and then China launched a policy to announce the full liberalization of the epidemic situation. At the same time, the National Health Commission issued the Guidelines for Home Treatment of COVID-19 and the medication reference table. Soon after, there were many cases of hospitalization due to drug abuse or misuse. The reasons can be analyzed through the listed aspects.

### **6.1. The Deviation of the Information Disseminated by the Media**

The information disseminated by the media is biased. At present, there are many ways for people to obtain information, including traditional media and new media. The information transmitted by traditional media will be released after being reviewed and confirmed to be correct. Its information is complete, rigorous, accurate and reliable. Compared with traditional media, new media platforms have a large number of We-media. Their information sources are different, and the content of dissemination is different. Therefore, there will be incomplete information, even wrong information. Liu Tiezhu found that there is a disintermediation phenomenon in short videos when studying domestic online short videos, which means that producers and users of content can interact directly without going through intermediate links [1]. If the censorship system of the new media platform is not rigorous enough, disintermediation will occur and incomplete information or wrong information cannot be blocked in time. With the rapid development of the Internet, it is very convenient to obtain information from the new media, prompting people to obtain information more frequently on the Internet. Scientific and accurate information is difficult to be found from the mass of health information, which leads to people being misled or deceived in the process of obtaining information.

### **6.2. Public Health Information Literacy**

People's health information literacy is relatively poor. In the face of emerging infectious diseases, public health literacy will affect individual health behavior. People with high health literacy can timely obtain accurate health knowledge and implement good health behavior. Conversely, people with low health literacy are more likely to listen to rumors. The health information literacy of the masses is reflected in their cognition. According to the research, fear and other negative emotions will significantly affect people's risk perception. Reasonable fear can arouse people's attention to health risks and improve the audience's compliance. The policy of full liberalization has made people aware of the possibility of large-scale transmission of the virus and urged people to pay attention to the situation of COVID-19 and the ways to resist COVID-19. People who feel health risks will examine their own problem cognition and judge their ability to solve risks. The public's understanding of COVID-19 is the basis for judgment. When people encounter risks that they cannot solve, they will try to search for and learn relevant information. Involvement in cognition will make people different in learning mode, cognitive state, and information processing. People who do not know enough about COVID-19 will collect information about COVID-19 through their own methods. In this process, the masses will receive correct or wrong information because of their different perceptions of involvement.

The emergence of these cases is certainly influenced by the media but also reflects that the public's health information literacy needs to be improved.

## **7. Suggestions**

In the process of promoting a healthy China, the government needs to fulfill its responsibilities. The government should become the backbone of the network health information dissemination. First

of all, the government can make full use of network technology to quickly discover pseudoscientific information, take timely response measures, and strive to put authoritative releases ahead of rumors. Secondly, the government can improve the legal system of the network platform, make the network information management more standardized, enhance the public legal awareness and encourage the supervision and reporting of pseudoscientific information. Finally, the government can use the network media to correctly guide public opinion, timely and accurately disclose the correct health information to the public, and enhance information transparency.

Traditional media should insist on publishing authoritative health information and give safe and reliable guidance to the masses. New media should give full play to the advantages of fast transmission and wide range of transmission. On the one hand, it should establish health information columns to disseminate professional and accurate health information; On the other hand, it should optimize the detection mechanism and review system. Health information has a great impact. Pseudoscientific information should be blocked in time. The combination of traditional media and new media should also be accelerated so that accurate and reliable health information can be transmitted to the masses more efficiently.

The improvement of public health information literacy is the key to improving the efficiency of health information dissemination. The masses should actively accept health education, pay attention to authoritative health information, fully learn health knowledge, establish correct health concepts, improve their health information literacy, learn to judge the authenticity of the information, and treat public health emergencies with a correct attitude.

## 8. Conclusion

This study analyzes the cause of acute liver injury cases during the epidemic and puts forward optimization suggestions based on the relevant research and theories of the predecessors. Health information is indispensable information, and the dissemination of health information needs to be cautious. In order to avoid the recurrence of such incidents, there are needs to speed up the optimization at the three levels of government, media and the masses. The limitation of this study is that the data mainly comes from literature, and there are few real-time and objective data. Future research can collect questionnaire data for relevant analysis. In addition, more relevant theories can be combined to further explore the optimization direction.

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