The Pandemic Infodemic: The Role of Risk Communication and Media in a Pandemic

Salgın İnfodemisi: Pandemide Risk İletişiminin ve Medyanın Rolü

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ABSTRACT

Coronavirus disease outbreak in Wuhan City in Hubei Province, China, in December 2019, soon spread to over a hundred countries. In March 2020, WHO declared COVID-19 a pandemic. Carrying high numbers of cases and mortality rates, far-reaching consequences of the global pandemic continues to be the prime global agenda. Communication efforts were maintained continuously during the epidemic to inform the public, raise awareness, take precautions and to eventually mitigate the pandemic so as to prevent the national health system from collapsing. Media played a key role as the public and health authorities disclosed information. Nevertheless, modern communication technologies and the infodemic spreading from social media hindered the communication of accurate information. Given the insufficient health literacy in Turkey, the rapidly changing and unstable pandemic environment resulted in information gaps and in overlooked information. The significance of critical media literacy and health literacy, particularly in digital media, was once again underlined. This study evaluates the influence of risk communication and media on society during the COVID-19 pandemic. In addition, the study assesses important concerns for media during risk periods, including a pandemic.

Key Words: COVID-19, pandemic, infodemic, risk communication, media, social media

ÖZET

Aralık 2019’da Çin’in Hubei Eyaleti Wuhan şehrinde başlayan koronavirüs hastalığı kısa sürede 100’den fazla ülkeye yayılmıştır. Mart 2020’de COVID-19 WHO tarafından küresel pandemi olarak ilan edilmiştir. Yüksek vaka sayıları ve ölümler yaşanmakta olan salgın, küresel ölçekte bugüne ve geleceğe her alanda etkilemesi nedeniyle, dünyanın en önemli gündem maddesi olmaya devam etmektedir. Salgında halkı bilgilendirmek, farkındalık yaratmak, önlem almak ve böylece salgını kontrol ederek ulusal sağlık sistemini çökmesini engellemek amacıyla iletişim çalışmaları aralicht olarak sürdürülmuş; kamu ve sağlık otoritelerinin bu bilgileri kamuoyu ile paylaşımında, medya önemli bir rol oynamıştır. Ancak, yeni iletişim teknolojileri ve sosyal medya kaynaklı infodemi bu süreçte sağlıklı bilgi açısından zorluklar yaşanmasına yol açmıştır. Türkiye’de sağlık okuryazarlığı düzeyinin yeterli olmadığı göz önüne alındığında, hızlı değişim ve belirsizliğin hakim olduğu bu pandemi süreci, bazı bilgilerin gözden kaçmasına ve bilgi boşluklarının oluşmasına neden olmuştur. Dijital medya başka olmak üzere, eleştirel medya okuryazarlığı ve sağlık okuryazarlığı konularının önemi bir kez daha ortaya çıkmıştır. Bu çalışmada COVID-19 pandemisinde risk iletişim ve medyanın toplum üzerindeki rolü değerlendirilmiştir. Ayrıca zamanda pandemi gibi risk dönemlerinde medyanın dikkat etmesi gereken konular gözden geçirmiştir.

Anahtar Sözcüler: COVID-19, pandemi, infodemi, risk iletişim, medya, sosyal medya

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INTRODUCTION

For long, nuclear wars were predicted to be the greatest risk threatening the world. Countries thus armed and discussed potential war scenarios. While the possibility of widespread epidemic outbreaks were raised every now and then, no one could have predicted the extent of this current global pandemic. The unforeseen pandemic rapidly engulfed countries in a multidimensional obscurity and trapped them in a strait.

Coronavirus Disease 2019 (SARS-Cov-2, COVID-19) is a respiratory illness that impacts over a hundred countries (1, 2). In December 2019, clusters of pneumonia cases of unknown etiology developed in Wuhan City in Hubei Province, China. Mass contagion struck within a few weeks and continued travels further spread the infection. As Chinese government reported escalating numbers of cases, emergency measures were implemented to counter the virus. On January 9, 2020, the disease was confirmed to be caused by a new type of coronavirus (3). The number of cases in China scaled rapidly and control measures were taken immediately (4). However, the virus spread to other countries at an unanticipated rate. On March 11, World Health Organization declared the COVID a pandemic(1, 5). In March, Europe was declared the centre of pandemic and increasing mortality rates in Italy, Spain and France in Europe, following the escalation in China, swapped anxiety for fear. By the end of March, the centre of pandemic shifted to the United States. Currently, in over hundred countries, the number of cases and the mortality rates of COVID-19 vary between countries. The global COVID-19 pandemic continues to be high on the agenda as its far-reaching consequences stretch across time.

Turkey was hit relatively late by the pandemic. The Ministry of Health and the Coronavirus Scientific Advisory Board had long implemented countermeasures by March 11, when the first coronavirus case was confirmed in Turkey. The first death due to coronavirus was confirmed on March 16, prompting rapid and radical social, economic, political, administrative, legal and religious measures. Health authorities underline that a pandemic of this extent has been unprecedented since long. The global number of cases and mortality due to COVID-19 increase incessantly. The pandemic brought forward the state of health workers and systems, insufficiency of medical supplies, increasing purchases in food, health and hygiene products, economy at a bottleneck, layoffs and psychological stress caused by isolation. Health communication, risk communication and the role of media in risk communication were also highlighted during these trying times. This study evaluates the role of media in the COVID-19 pandemic.

Risk Communication

While some experts quote Beck’s (1992) “Risk Society” to explain the current pandemic, Beck did not actually use the term epidemi. Risk, often described as injuries due to hazard and mortality risk, as well as risk communication play a significant role in health communication literature (6). Risk communication refers to building through verbal and/or non-verbal structured messages of an individual or a group in the minds of the target audience a sense of injury and mortality related to an evident hazard (4, 5, 7, 8). Historically, risk communication focused on public communication concerning industrial, medical, environmental and social risks and related hazards, which could affect societies or individuals.

Risk communication aims to mitigate, alleviate and manage potential risks. Though it’s essentially built on current knowledge, long-term plans; routine, controlled, structured and systematic messages; and the opinions of scientists and technical experts are crucial in risk communication (9-11). Risk periods bring an unstable and unclear state of communication. This uncertainty and instability highlight the significance of risk communication in the re-establishment of stability. However, if not managed properly, risk communication could also trigger new risks, crisis and chaos. Trust, reliability, honesty, transparency and accountability are crucial in risk communication and the lacking thereof could hinder all efforts. Past experiences demonstrated that misinterpretation of information, insufficient or misinterpreted warnings, rumours, sensation and inconsistent information result in the outbreak of new risks (6, 8).

Risk communication research and planning incorporate risk assessment, risk intervention and risk management based on the cultural structure of societies. The content, timing, wording and audience of the information, or the messages in risk communication depend on the risk management activities of decision-makers. Crisis communication, on the other hand, is often mentioned along with risk communication yet it differs in nature.

It involves high levels of uncertainty, lack of information and accusations, as well as reactive and short-term activities. Risk communication includes a wider scope of activities and process than crisis management. Ideally, risk communication amidst a pandemic aims to encourage society in prevention activities, patience and recovery to maximize efficient and joint action capacity (10-12). Communication efforts should not be neglected in risk management planning during an epidemic since they can help society adjust to uncertainties and changing norms. Risk communication between pandemic management planners and/or boards and the society entails dialogue and interaction on potential problems, current deficiencies and resources. Initial strategies in risk communication should also include individual and social capacity assessment to provide a guideline in communications planning (10, 13). Messages should range from the adoption of simple, yet effective habits (hand-washing, hygiene, etc) to the relief of anxiety, fear and uncertainties (quarantines, school and business closings, financial distress etc). Communication loopholes will be filled in by various parties or interest groups, causing potential impact, even harm to vulnerable individuals. Therefore, it is essential to overcome disruptive, parasitic voices in the desired cooperative information exchange and to further strengthen the clear messages.

Historical and contemporary experience on public health risks show that insufficient and misleading communication widely endanger risk management. Even minor mistakes might blink all confidence in risk management capacity and cause unexpected and undesired consequences.

Indeed, it is not easy to estimate the impacts of pandemic on daily life, nor the potential mortality or morbidity rates. Health authorities remind that it is natural for messages to change course keeping up with the dynamic and unstable nature of pandemic (13-15). Initial basic information delivered at the inception of the epidemic (hand-washing etc) will soon be replaced with new information. Messages will evolve along the course. It might therefore be necessary to repeat or to change messages such as to clear uncertainties, reshape public expectations, adjust to new developments and persuade to cooperation. Rapidly changing and/or incoherent information during uncertainties, including pandemics, might discourage people from cooperating in risk mitigation. As the establishment and maintenance of trust is highly significant in risk communication, public’s understanding and/or interpretation of messages as well as the motivation and intention to keep up the measures should be closely followed. Trust involves the competency, justice, honesty, accountability and transparency of leaders or risk managers and it can be influenced by the qualities, performances or the messages of official spokesmen during a pandemic.

Media plays a key role in access to accurate and up-to-date information and in informing the fearing and anxious public. During the COVID-19 pandemic, positive and negative aspects of traditional and modern media came into focus.

The Role of Media in a Pandemic

Media played a significant role in the epidemic since the first confirmed case. It not only informed the public, but was also effective in risk management and public motivation. Media declared case and death statistics, discussed the matter in several aspects, and briefed viewers/readers on global developments. Current home quarantine required most people to stay home, who eventually developed a greater interest in media and news programmes.

It is well-known that the modern, fast and easy-to-use communication technologies become more popular day by day. Modern media, and notably social media gained an increased popularity during the epidemic (16). Misleading insufficient and rumours and conspiracy theories in global circulation on social media since the early cases made it quite difficult to comprehend the developments and to take measures concerning the virus (17-23). The unique infodemic ecosystem of social media triggered fear and panic about COVID-19 as the first cases were confirmed by China. Subsequently, accurate information was overlooked and a widespread, racist hate-speech emerged. Infodemic is described as an excessive amount of incorrect or exaggerated information or news. It prompts fear and panic in society, creating confusion regarding trustworthy individuals and news sources. The sensational, widely inaccurate information spreading faster than the virus on social media negatively impacted awareness efforts on the virus(4, 16, 17, 24-30). Sensational, fear-inducing information are known to spread rapidly and to attract more interest than accurate information.
In the future, considering public health risks and focusing on enhancing public health awareness and health literacy will facilitate potential risk management.

Conflict of interest
No conflict of interest was declared by the authors.

REFERENCES
1. Garfin DR, Silver RC, Holman EA. The novel coronavirus (COVID-19) outbreak: Amplification of public health consequences by media exposure. Health Psychology. 2020; 39: 355-7.
2. WHO. WHO Statement on Cases of COVID-19 Surpassing 100,000. 2020.
3. Shahsavari S, Holur P, Tangherlini TR, Roychowdhury V. Conspiracy in the Time of Corona: Automatic detection of Covid-19 Conspiracy Theories in Social Media and the News. 2020.
4. Johnson LP. Understand Virus More, Fear It Less. Braille Forum. 2020. 24.
5. Li, Zhang Q, Wang X, Zhang J, Wang T, Gao T, et al. Characterizing the Propagation of Situational Information in Social Media During COVID-19 Epidemic: A Case Study on Weibo.
6. IEEE Transactions on Computational Social Systems, Computational Social Systems, IEEE Transactions on, IEEE Trans Comput Soc Syst. 2020; 7: 556-62.
7. Sezgin D. Tibblesteşirilen Yaşam Bireyelleştirilen Sağlık. İstanbul: Ayrnt; 2011.
8. Aslan R. Tarıhtan Günümüze Epidemiler, Pandemi ve Covid-1. Göller Bölgesi Aylık Ekonomi ve Kültür Dergisi Ayrnt. 2020; 8(85).
9. Liwee Z, Huijie L, Kelin C. Effective Risk Communication for Public Health Emergency: Reflection on the COVID-19 (2019-nCoV) Outbreak in Wuhan, China. Healthcare. 2020; 8: 64.
10. Jardine CG. “Keep it short and sweet” Improving risk communication to family physicians during public health crises. Canadian Family Physician. 2020; 66: E99-E106.
11. Sell TK, Ravi SJ, Watson C, Meyer D, Pechta LE, Rose DA, et al. A Public Health Systems View of Risk Communication About Zika. 2020.
12. Melinda F, Richun L, Ronald M, Qur'an M, Rupian X. Progress in public health risk communication in China: lessons learned from SARS to H1N1. BMC Public Health. 2019; 19: 1-9.
13. Glik DC. Risk Communication for Public Health Emergencies. Annual Review of Public Health. 2007; 28: 33-54.
14. Abrams EM, Greenhawt M. Risk Communication During COVID-19. The Journal of Allergy and Clinical Immunology: In Practice. 2020.
15. Karasneh R, Al-Azzam S, Muffly S, Soudah O, Hawamdeh S, Khader Y. Media’s effect on shaping knowledge, awareness risk perceptions and communication practices of pandemic COVID-19 among pharmacists. Research in Social and Administrative Pharmacy. 2020.
16. Lohiniva A-L, Sane J, Sibenberg K, Puulmalainen T, Salminen M. Understanding coronavirus disease (COVID-19) risk perceptions among the public to enhance risk communication efforts: a practical approach for outbreaks, Finland, February 2020. Euro surveillance : bulletin Europeen sur les maladies transmissibles = European communicable disease bulletin. 2020; 25(13).
17. Eady L. COVID-19’s effects on social media. 2020. http://search.ebscohost.com/login.aspx?direct=true&db=eds4au&AN=eds4au.14322b98&authtype=ip,uid
18. Groza A. Detecting fake news for the new coronavirus by reasoning on the 19. COVID-19 ontology. arXiv preprint arXiv:2004.12330, 2020 - arxiv.org
19. O’Connor C, Murphy M. Going viral: doctors must tackle false news in the covid-19 pandemic. BMJ Clinical research ed. 2020; 369: m3587.
20. Vahideh Zareh G. Infodemic in the Global Coronavirus Crisis. Tavsiyelär salamat. 2020; 11(1): 1-5.
21. O’Connor C, Murphy M. Going viral: doctors must tackle false news in the covid-19 pandemic. BMJ Clinical research ed. 2020; 369: m3587.
22. Vahideh Zareh G. Infodemic in the Global Coronavirus Crisis. Tavsiyelär salamat. 2020; 11(1): 1-5.
23. Han X, Wang J, Zhang M, Wang X. Using Social Media to Mine and Analyze Public Opinion Related to COVID-19 in the early phase of the outbreak. Mathematical Biosciences and Engineering. 2020; 17: 2693-707.
24. Saxon B, Bass SB, Wright T, Panick J. E bola and the rhetoric of US newspapers: assessing quality risk communication in public health emergencies. Journal of Risk Research. 2019; 22: 1309-22.
25. Cha J, Cho H, Lee Y, Hong J, Lee J. Influences of news events on public health communication: The case of the 2019-nCoV epidemic. Social Science & Medicine. 2020; 252: 113497.
26. Banstani P, Bahrami MA. COVID-19 Related Misinformation on Social Media: A Qualitative Study from Iran. Journal of medical internet research. 2020.
27. Nord DP, Social media can be a good thing during covid-19. 2020.
28. Smith KC, Rimal RN, Sandberg H, Storey JD, Lagasse L, Maulsby C, et al. Understanding newsworthiness of an emerging pandemic: International newspaper coverage of the H1N1 outbreak. Influenza and Other Respiratory Viruses. 2013; 7: 847-53.
29. Covid-19 rumours on social media hit poultry farmers hard, a kg of live chicken sells for Rs 10. 2020.
30. Zavarrone E, Grassia MG, Marino M, Cataldo R, Mazza R, Canestrari N. C.O.M.E.T.A. – covid-19 media textual analysis. A dashboard for media monitoring. 2020.