Exposure to coronavirus (COVID-19) using narrative and simulated experience approaches: A commentary

Introduction

In the late December 2019, coronavirus (COVID-19) outbreak had started in Wuhan, China, and so far, it has spread to many Asian, European, and American countries such as Iran, South Korea, Italy, Canada, France, Germany, and the United States. On January 30, 2020, the World Health Organization (WHO) announced the prevalence of the new disease namely COVID-19, acknowledging that the disease could spread quickly in countries which are not ready to be encountered with it.[1-3] From the earliest days of corona outbreak in China, the initial affairs have been taken to control the virus. The rapid response of the Chinese Centers for Disease Control and Prevention (China CDC) significantly facilitated the clinical recognition as well as the early realization of the infection epidemiology.[4] Evidence suggests that other countries have also sought to include the virus through information and successful experiences from China and the WHO.^[5] Undoubtedly, the context of information and media experiences in the COVID-19 crisis should have certain features which could be utilized effectively by health practitioners and the general public for the influential prevention, recovery, and treatment. This article tries to explain two approaches in the form of narration and decision-making based on simulated experiences previously proposed by Hogarth and Soyer^[6] in COVID-19 control process. In this article, the authors use the term "narration" instead of "storytelling."

Methods

Proposing modern topics for researchers regarding a particular topic is one of the main features of a commentary while the authors of these types of articles intend to speculate about the subject's future direction and to direct the minds of the other researchers to the topic.^[7] The authors' enough experience and knowledge about the subject also assists to better express their viewpoints. Accordingly, the authors draw on the scientific evidence such as Hogarth and Soyer's article^[6] and other published experiences related to other diseases as well as previous knowledge and experience of authors, especially in the areas of health information literacy, media literacy, health information needs, and information literacy, which offers information exposure

to the COVID-19 in two forms of information provision: one for the general public (i.e., narration format) and one for state officials as well as health practitioners (i.e., the simulated experiences).

Information provision in narration format

At present, coronavirus has impacted various strata, including children, the youth, the middle-aged, and older, and common prevention guidelines for each of them, as well as particular guidelines for specific audiences are released regularly by the health-related organizations. Seemingly, the high level of compliance through received information and the health guidelines appear to be relied on the simplicity and practicality of those messages. Indeed, providing information to make the right decisions and judgments, particularly for the general public, should be like listening to an interesting narration so that in narration, you should first know what to want to state; second, you should know your audience who you are; and third, you have the ability to match your message to the requirements of the audience. [6] Due to its broad audience, this information should be simple and clear, proportioned to audience's needs, and matched to the message level and the audience. Various researchers^[2,3,8-12] have investigated the prevalence of coronavirus from discovery point to the clinical researches. The authors of this article have mentioned parts of their texts as an instance, which seems to have a narration format:

"For the first time in December 2019, three adult patients in Wuhan city, Hubei Province, China, were diagnosed with severe pulmonary failure. Two patients were discharged from the hospital after treatment, however the third one died.^[2,3] The physicians cited the cause of his death as acute respiratory infection due to an unknown virus. Other referrals of other patients with similar symptoms in the area prompted the CDC to send a team for conducting research. Epidemiological studies indicate that the deceased and other patients had a high market share in the seafood wholesale market. In this market, the sales of foods containing poultry, snakes, bats, and other live animals are carried out. [2,3,12] Primary tracking of zero patients (The zero patient is the first human patient who is infected with a particular disease or microbe. Diagnosis of this person is important due

to provide useful information about the practice, place, and the reason of transforming disease factor to human), the origin of the virus in the wholesale market of seafood, especially horseshoe bat species are traced in Wuhan, China^[2,10,11] because bats have thirty coronary tumors and in fact, they are the host of the virus.[3,11] In any case, the virus could infect human respiratory diseases in addition to infecting economically important vertebrates such as poultry and pigs.[8] Researchers named the virus 2019-nCOVID. It is perhaps worth to note that among 366 hospitalized children, only six tested positive for COVID-19, having no reports of any of them or their families in the epidemic area. [9] However, common disease features are mentioned as high fever, dry cough, and shortness of breath. [2,8,10] Most patients were treated empirically with antiviral drugs and supportive antibiotics and recovered for an average of 7.5 days after hospitalization. [8] Because the coronavirus has just been discovered and there are still very limited diagnostic tools and laboratories, these diagnoses have not been definitively confirmed until the present study."[2,3,8-12]

The WHO and other health-related organizations have narrated, in the form of narration, the most primitive methods of preventing COVID-19 disease, which have been extensively influential in both its control and prevention. Some instances of these simple health messages are taken from the WHO's website as follows:^[13]

- 1. Avoid physical contact when greeting (safe greeting includes shaking hands and bowing)
- 2. Wear gloves
- How to wash hands with soap and running water (after coughing, runny nose, and before and after eating)
- 4. Stay home and manage your emotions to decline stress during the challenging time of this outbreak:
 - Read entertaining and funny contents
 - Maintain a healthy lifestyle/proper diet, sleep, exercise
 - Contact your friends or family by phone and E-mail
 - Use leisure time to entertain and creativity.
- 5. Avoid smoking and alcohol consumption.

As mentioned earlier, providing information for making correct decisions and judgments, particularly for the general public, should be like listening to an interesting narration. Because of its extent audience, this information should be simple and clear, proportioned to the audience's requirements and matched to the message level as well as the audience. In coronavirus crisis, the provision of narrative health information by the valid universal organizations, especially WHO, as well as health practitioners in some countries are some instances of success narration approach to impact audiences.

Decision-making based on simulated experiences

The ability of senior executives and health professionals to process simulated experiences is an approach to enhance evidence in critical decision-making. If the obtained experience from the simulation is valid (i.e., abundant, impartial, and immediate), it provides a perfect empirical and visual approach for the decision maker and guides him/or her to a specific choice. [6] In this regard, in accordance with the WHO, using simulated experiences to prevent and treat this disease by health practitioners could also significantly minimize the time for medicine discovery and modern antivirals as well as make prevention to be more effective. [14]

For this, the WHO Scientific and Technical Advisory Group started announcing in this field on January 7, 2019, calling for monitoring its prevalence on a daily basis, and ask all countries to share their experiences and strategies in the shortest possible time. [15] At present, many countries involved in the coronary crisis, including Iran, Italy, South Korea, the United States, and others, have taken both decisions and measures based on successful experiences, especially from China to control the disease. Some of these experiences, which are shared on the WHO website, are as follows: [13]

- 1. Preparation of laboratory coronavirus kit
- 2. Establishing specific laboratories for coronavirus
- 3. Special hospitals dedicated to hospitalization and treatment of patients with coronavirus
- 4. Providing effective drugs to control and improve patients with coronavirus
- 5. Finding a zero patient with coronavirus
- 6. Quarantine the medical staff (physicians, nurses, and so forth)
- 7. Closure of kindergartens, schools, and universities (education through virtual systems)
- 8. Closure of the offices and encouraging employers to allow employees to work from home where possible (by telecommuting)
- 9. Closure of shopping markets and cancel large gatherings
- 10. Distribution of health packages
- 11. Prepare maps of the spread of coronavirus outbreaks throughout the country
- 12. Prepare a map of high-risk areas based on traffic levels of people with coronavirus disease
- 13. Use online banking services or online shopping and video calls.

In addition to the WHO, the other health organizations, including CDC (https://www.cdc.gov/) and NHS (https://www.nhs.uk/conditions/), have also made their experiences related to COVID-19 available to others. Indeed, pioneering countries in prevention and treatment, there were countries in which science has

been accepted by senior executives and consequently other social members and has utilized the experiences of other countries at the right time and place.

Conclusion

Information should be used at both the individual level and management at the organizations' and decision makers' levels. The narration format is an objective example of information at the individual level used by the general public. This information would not be effective if it is not appropriate to the audience's needs. Narration is one of the best ways to impact the audience because narration has a narrative and appealing form, and the public welcomes it for information. This form attracts the audience due to its appealing, comprehensible, and highly effective audience, and usually alters individuals' knowledge, attitude, and performance. On the other hand, health practitioners in COVID-19 crisis need reliable information (i.e., management), and much of it derives from experiences because in crises, new experiences are used rather than the previously written information. Therefore, the successful experiences of countries such as China regarding COVID-19 control should be utilized by the other countries. Obviously, taking advantage of these experiences would speed up the decision-making process of the state authorities in different countries to control and monitor this disease. Indeed, the basis for prevention, diagnosis, treatment and rehabilitation of patients is the use of reliable and up-to-date information at the right time and place.

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References

- Zhu W. Should, and how can, exercise be done during a coronavirus outbreak? An interview with Dr. Jeffrey A. Woods. J Sport Health Sci 2020;9:105-7.
- Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, et al. A Novel Coronavirus from Patients with Pneumonia in China, 2019. N Engl J Med 2020;382:727-33.
- Phan T. Novel coronavirus: From discovery to clinical diagnostics. Infect Genet Evol 2020;79:104211.
- Mahase E. China coronavirus: Mild but infectious cases may make it hard to control outbreak, report warns. BMJ 2020;368:m325.
- Patel A, Jernigan DB. Initial public health response and interim clinical guidance for the 2019 novel coronavirus outbreak–United States, December 31, 2019–February 4, 2020. MMWR Morb Mortal Wkly Rep 2020;69:140.
- Hogarth RM, Soyer E. Providing information for decision making: Contrasting description and simulation. J Appl Res Mem Cognn 2015;4: 221-8.
- Berterö C. Guidelines for writing a commentary. Int J Qual Stud Health Well-being 2016;11:31390.
- Fung TS, Liu DX. Human Coronavirus: Host-Pathogen Interaction. Annu Rev Microbiol 2019;73:529-57.
- 9. Liu W, Zhang Q, Chen J, Xiang R, Song H, Shu S, *et al.* Detection of Covid-19 in Children in Early January 2020 in Wuhan, China. N Engl J Med 2020;382:1370-1.
- Luk HK, Li X, Fung J, Lau SK, Woo PC. Molecular epidemiology, evolution and phylogeny of SARS coronavirus. Infect Genet Evol 2019;71:21-30.
- 11. Wong AC, Li X, Lau SK, Woo PC. Global Epidemiology of Bat Coronaviruses. Viruses 2019;11:174.
- Ji W, Wang W, Zhao X, Zai J, Li X. Cross-species transmission of the newly identified coronavirus 2019-nCoV. J Med Virol 2020;92:433-40.
- 13. World Health Organization. Technical Guidance. World Health Organization; 2020. Available from: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance. [Last accessed on 2020 Mar 16].

- 14. World Health Organization. National Capacities Review Tool for a Novel Coronavirus (nCoV). World Health Organization; 2020. Available from: https://www.who.int/docs/default-source/coronaviruse/national-capacities-review-tool-for-a-novel-coronavirus-ncov.pdf. [Last accessed on 2020 Mar 15].
- 15. HeymannDL, Shindo N, WHO Scientific and Technical Advisory Group for Infectious Hazards. COVID-19: What is next for public health? Lancet 2020;395:542-5.

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