

# Tumor of misinformation consumption and sharing among people in Coronavirus (Covid-19) crisis; a commentary

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## Dear Editor-in-Chief

The Coronavirus (Covid-19) was one of the unpredictable challenges for all countries. The crisis began in China in late 2019 and other countries around the world were immediately affected by the virus.<sup>1</sup> One of the negative consequences of crises is the production high volume of accurate and incorrect information to the extent that it becomes difficult for both people and statesmen to control. Rothkopf, in 2003 in the Washington Post newspaper on the SARS topic, noted the issue of Infodemy, a combination of information and epidemics. In the years that followed, he used this term regarding to the Ebola virus and Avian and he considered the spread of false news as a threat to the world.<sup>2</sup> It seems that what is threatening, apart from the amount of inaccurate news and information, is the consumption and sharing of this news largely and unmanageable. During Covid-19 crisis, this concept was strongly expressed; because the specific features of the virus, such as the speed of its transmission and dissemination and also the presence of new technologies, especially social media, have intensified the issue of producing and publishing false news. Besides that, in crises such as Ebola, the role of modern media, such as social media, was very weak, but today it has become increasingly important because of social media penetration. In addition to Infodemy, a new phenomenon has emerged in the Covid-19 crisis, which can be called Tumor of Misinformation Consumption and Sharing (TMCS). "Although, tumor of consumption has previously been linked to phenomena such as fashion and cultural as well as economic pattern".<sup>3</sup> TMCS is introduced by this articles' authors according to the conditions governing the production and dissemination of information in the Coronavirus crisis. TMCS is a situation in which a person willfully and unwittingly engages in the search and dissemination of inaccurate news and information, and even other private information; so that the person has no control over his or her situation and inflicts serious material and non-material damages on him and other people. In addition, this misinformation sharing behavior can also be attributed to COVID-19 Related Misinformation Sharing (CRMS). This article first describes the characteristics of these individuals and then discusses the role of different professions including medical librarians in solving this problem.

## Characteristics of People Involved in TMCS

People with TMCS choose and share inaccurate news and information. This will be a worrying process if neglected. According to the authors of this article, these individuals have certain characteristics that need to be addressed by health professionals and researchers:

1. Spending too much time for consuming and sharing inaccurate information;
2. Select fake news quickly and maximize its sharing;
3. Superficial handling of incoming messages;
4. Inattention to the adverse effects of that information on themselves and society;
5. Affected by phenomena such as information obesity and information addiction;
6. The diversity and multiplicity of used media to consume and share information;
7. Injecting stress and anxiety into society;
8. Cyberchondria experience (uncontrolled and excessive health anxiety);
9. Suspicion on other people;
10. Critical thinking at a relatively low level;
11. Being infected by nomophobia (fear of losing or keeping away from cell phones);
12. Low-level emotional intelligence due to lack of self-management and self-control;
13. Ignoring people's privacy by sharing their private information;
14. Increasing aggression and isolation among them;
15. Interest in being seen by others (people or power holders).

## Treatment of People Involved in TMCS

It sounds that people involved in TMCS have taken this path, voluntarily and involuntarily. Therefore, in order to treat this phenomenon, education is needed in the first stage. Some people do not have complete perception of this kind of their behavior. For example they do not know that incorrect information can sometimes lead to human death. In the Covid-19 crisis, some people turned to alcohol consume, and this was due to inaccurate news and information being exchanged between people about the benefits of alcohol in prevention and treatment. In fact, the misconception that alcohol can

save you from Covid-19 or cure you. Therefore, these people should receive targeted education. It is the task of the mass media to reduce these misleading and misconceptions ideas in society by inviting health experts. In addition, educating people about health media literacy can also be very important. People should be taught how to distinguish between fake news and true health news. Media specialists, cultural management professionals, and medical librarians can handle this task. Since medical librarians equipped with the necessary knowledge and awareness about the infrastructures of production and dissemination of health information as well as their familiarity with the typology of information can play an essential role in teaching proper health information seeking behavior when facing with the crises. Educating people by health information literacy, health literacy, media health literacy, and training appropriate behavior during the crisis are other actions that medical librarians should consider about the prevention. It should also be said that educating people to identify valid health information from invalid information will be the most important action of medical librarians in the face of crises. Besides that, they should be able to identify valid health messages through reliable health-related organizations such as the World Health Organization and share them through new technologies and appropriate to user characteristics (gender, age, culture,). Experiencing this crisis should enhance medical librarians' intention to be more active and effective in future disasters. In addition, media ethics need to be re-educated to both the public and media stakeholders. "The mass media must know that their mission is to enlighten public opinion and raise people's knowledge,"<sup>4</sup> and violation of that law includes social (pressure and reaction from public opinion) and legal prosecution. People also need to know that their rights in areas such as preserving chastity and public morality, fairness, and impartiality observation in the media, the right to maintaining the persons respect and the prohibition of defamation and insult, mental health observation (avoid violence), the right to media responsiveness, the right to respect religious beliefs, the right to sue the media for wrongdoing and litigation, the right to access correct information and news, and prohibition of false news should be preserved by medias.<sup>3</sup> These media can be both mass media and social media. Another thing to note is social media. In fact, part of dissemination of inaccurate information is through social media. Since the production and sharing of information on social media is less controlled, it should be monitored more by the individual user. Therefore, self-care education should take place in different dimension of social, cultural, and social media contexts. "People must ask themselves a few basic questions before using the media message, especially social media: (1) who is the producer and distributor of this information? (Knowing the author of the message), (2); what creative technique has been used to attract the attention of the audience? (Find structure) (3); to what extent different people may have different perceptions of this message? (Audience review); (4) why is this message sent? (Ultimate goal of this message); (5) what values, lifestyles, and perspectives will be represented or eliminated in this message? (Content Review)."<sup>5</sup> In addition, apart from educating people in order to promote correct behavior patterns in society in various dimensions, it is needed to make strict rules on some antisocial behaviors, including fake news. In fact, the main pillars of an advanced society are education and culture, and the

second is the adoption of rational and ethical laws and adherence to them.

## Conclusion

Covid-19 will not be the first crisis and the last one in the world. What is important is how people and statesman deal with this crisis. The position of society in terms of hardware (facilities and equipment) and software (knowledge and awareness, policy, ethical, and logical rules), determines the extent of crisis management. The Covid-19 crisis in the information and communications dimension created a new phenomenon called "TMCS" or "CRMS" and it also expanded sharply. Some reasons for this phenomenon, apart from the features of Covid-19, is people's staying at home and having no schedule. Symptoms of an individual affected by this phenomenon, is spending a lot of time on social media, and the sharing of false news extremely which is very destructive to the mental health of both herself and others. However, disseminating inaccurate news also reduces the proper performance of governments in doing duties. What is harmful in this crisis and similar ones besides the crisis itself, is false news which frustrates people and even make distrust against the government. Diagnosing, treating, and rehabilitating people with this immoral behavior depends on training the health information literacy, health literacy, and media health literacy, which medical librarians can fulfill this critical task as before. In addition, identifying valid health messages and sharing them with the general public is another task of medical librarians. Likewise, the establishment of rational and ethical laws in that community about the production and sharing of information would be another solution to this problem. According to the authors' opinion of this article, these individuals have certain characteristics that need to be scientifically investigated by health professionals and researchers, while paying special attention to them in codification or health affair. Medical librarians should also conduct effective research and practice appropriate to their discipline.

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## Authors' contribution

H. A. conceived the original idea, designed the scenarios and collected the data. H. A. and H. A., Z. K carried out the analysis of data, approved the final version that was submitted, revised it. H. A. and Z. K drafted the manuscript. H. A. and Z. K. met the criteria of authorship based on the recommendations of the International Committee of Medical Journal Editors.

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