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Commentary

COVID-19 Pandemic and Needs to Invest in Improving Public Media Food and Nutrition Literacy

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ABSTRACT

While world is fighting the COVID-19 pandemic, there is an infodemic of misinformation occurs that needs urgent attentions. This commentary underscores importance of media food and nutrition literacy (MFNL) and appropriate policies to improve MFNL and nutrition education as integral parts of the public health response to COVID-19 emergency as well as long-term investments during post COVID-19 era.

Keywords: Food and nutrition literacy, COVID-19, Media food and nutrition literacy

Introduction

Investments in health literacy and food and nutrition literacy (FNL) and assurance of equitable public access to food and nutrition information and services have never been necessary more than the days of COVID-19 pandemic. Combined effects of COVID-19 lockdowns and other measures to stop spread of the virus and its resultant economic hardship can disrupt function of the food systems and threaten food security and nutrition of millions of people (1). The pandemic can deteriorate the double burden of malnutrition in countries concurrently experiencing political instabilities, conflicts and financial and environmental crises (2). Therefore, large-scale and multi-sectoral coordinated actions are needed to moderate the double burden of malnutrition through strengthening social protection systems for vulnerable people and ensuring further sustainable and resilient food systems during and post COVID-19 era (1). While world is fighting the pandemic, infodemic of misinformation, as called by the World Health Organization (WHO) (3), occurs that needs urgent attentions. Exposure to facts, misinformation, contradictory and false information regarding health issues such as food and nutrition, especially through social media, can include devastating effects on mental and physical health of the public. This may increase risks of COVID-19 complications, especially in disadvantaged individuals.

Media food and nutrition literacy during Covid-19

Along with broader measures that prioritize social protection programs to improve food security and nutrition and fight poverty, improvement of the media food and nutrition literacy (MFNL) as a part of the health literacy can help decrease effects of COVID-19 by empowering people at risk of education disparities. The need and importance of communicating accurate information on maternal, infant and young-child nutrition during the pandemic have properly been emphasized by the United Nations (UN) organizations in Middle East and North Africa (4).

FNL is a concept that connects food-related knowledge and skills to healthy dietary practice(s) (5). The MFNL, as one of the aspects of health literacy, is the ability of individuals to develop, disseminate, assess and criticize nutrition-related information and messages in non-digital and digital media (6, 7). Ensuring a better FNL, providing truthful nutrition messages for the public and dealing with nutrition misinformation during crises, including COVID-19 pandemic, need multi-sectoral collaboration and partnership between the health and non-health sectors, including media, Ministry of Information and Communications, Ministry of Education and Municipalities and citizens. Therefore, efforts at the national and international levels (8, 9) need to be identified, assessed and analyzed to result in appropriate

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solutions. In Iran where a fundamental progress has been carried out in FNL research (10–12), a remote phone-based nutrition consultation system via primary health care (PHC) network and official website has been launched by the Ministry of Health and Medical Education (MOHME) (13) . Through this service, public access to appropriate information on health, food and nutrition issues is facilitated during the COVID-19 crisis (13). Similar programs have been reported from other countries such as Azerbaijan, where the United Nations Children's Fund (UNICEF) has supported radio broadcasts with public health specialists to inform people about child nutrition and maintaining routine vaccinations during the COVID-19 pandemic (14). In South Africa, an internet radio station called “Wa FM” has been launched to fight false information on COVID-19 with the engagement of volunteer journalists who cross-check information to correct fake news on social media (15). At international levels, UN has launched a global campaign called “Verified” since May 2020 that creates accurate information about the crisis and engaged information volunteers known as digital first responders to create online and broadcast platforms from verified international organizations, including WHO (16).

Despite importance of rapid responses in emergency situations such as COVID-19 pandemic for appropriate nutrition information dissemination to improve preparedness of health systems, long-term interventions are necessary to improve FNL. This can be carried out through incorporating this concept into formal and informal education programs targeting children and adolescents as well as general public via appropriate settings and evidence-informed approaches (5). To limit or prevent distrust of specialists and people regarding scientific nutrition information, actions are recommended to strengthen university-community partnerships and empower nutrition-promotion community-based voluntary organizations and their capacities for citizen engagements. Moreover, establishment of mechanisms for checking quality or truthfulness of public nutrition data sharing as well as content analysis of the quality of food and nutrition information on social media and developing fact-checking initiatives, digital platforms and innovations for virtual nutritional information can be helpful to address nutrition misinformation. Discovering public dominant discourses on food and nutrition beliefs through social media and measuring and tracking information-seeking behaviors are needed for further targeted or public initiatives to promote MFNL.

Conclusion

Providing equitable food and nutrition education, especially via the aspect food and nutrition systems, is important to help achieve sustainable development goals (SDGs) linked to food security and nutritional health. Moreover, it can lessen effects of COVID-19 on societies. It is the time for global and regional partnerships to share concepts, lessons, novel methods to improve FNL and MFNL in various countries, while adopting context-sensitive considerations. During the fourth industrial revolution when people are producers and consumers of information, developing initiatives can be helpful to improve MFNL through mass media or online and open virtual programs for nutritional education. However, this needs consideration of ethnic and cultural differences and competences, protocols to reach disadvantaged and individuals experiencing critical life-course stages and development of distance-learning infrastructures to prevent health and nutrition information gaps and inequalities. Viruses do not discriminate, nor should health (17) or nutrition education systems.

References

1. United Nations Secretary General (2020), Policy brief (2020): The impact of COVID-19 on food security and nutrition:https://www.un.org/en/coronavirus/un-secretary-general.
2. Food security information network. (2020). Global report on food crisis 2020. https://www.wfp.org/publications/2020-global-report-food-crises.
3. Zarocostas J. How to fight an infodemic. The Lancet. 2020;395(10225):676.
4. Joint Statement from the Regional Directors of UNICEF, FAO, WFP and WHO (2020): Food crisis likely to worsen in the Middle East and North Africa as COVID-19 continues.https://www.unicef.org/mena/press-releases/food-crisis-likely-worsen-middle-east-and-north-africa-covid-19-continues.
5. Doustmohammadian A, Omidvar N, Shakibazadeh E. School-based interventions for promoting food and nutrition literacy (FNLIT) in elementary school children: a systematic review protocol. Systematic reviews. 2020;9:1-7.
6. Levin-Zamir D, Bertschi I. Media health literacy, eHealth literacy, and the role of the social environment in context. International journal of environmental research and public health. 2018;15(8):1643.
7. Steils N, Obaidalahe Z. “Social food”: Food literacy co-construction and distortion on social media. Food Policy. 2020:101932.
8. Wikkeling-Scott LF, Ajja RJY, Rikard RV. Health literacy research in the Eastern Mediterranean Region: an integrative review. International journal of public health. 2019;64(4):523-33.
9. Al-Jawaldeh A, Rayner M, Julia C, Elmadfa I, Hammerich A, McColl K. Improving Nutrition Information in the Eastern Mediterranean Region: Implementation of Front-of-Pack Nutrition Labelling. Nutrients. 2020;12(2):330.
10. Heshmat R, Abdollahi Z, Ghotbabadi FS, Rostami M, Qorbani M, Homami MR, et al. Nutritional knowledge, attitude and practice toward micronutrients among Iranian

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[DOR: 20.1001.1.23830441.2021.8.4.3.7]

households: the NUTRI-KAP survey. Journal of Diabetes & Metabolic Disorders. 2015;15(1):42.

11. Doustmohammadian A, Keshavarz Mohammadi N, Omidvar N, Amini M, Abdollahi M, Eini-Zinab H, et al. Food and nutrition literacy (FNLIT) and its predictors in primary schoolchildren in Iran. Health promotion international. 2019;34(5):1002-13.

12. Safavi S, Omidvar N, Djazayery A, Minaie M, Hooshiarrad A, Sheikoleslam R. Development of food-based dietary guidelines for Iran: A preliminary report. Annals of Nutrition and Metabolism. 2007;51(Suppl. 2):32-5.

13. Department of Community Nutrition, Deputy of Health, Ministry of Health and Medical Education (2020), Executive instructions for nutrition consulting in the 4030 system. https://file.qums.ac.ir/repository/vch/Edu/Corona/Corona_Low22.pdf

14. UNICEF Europe & Central Asia Region (ECAR) (2020). Novel Coronavirus UNICEF Europe & Central Asia Region (ECAR)Novel Coronavirus(COVID-19). https://reliefweb.int/report/tajikistan/unicef-europe-central-asia-region-ecar-novel-coronavirus-covid-19-situation-report.

15. Reporters without borders (2020). COMBATTING DISINFORMATION. https://rsf.org/en/wa-fm.

16. UN news (2020). UN launches new initiative to fight COVID-19 misinformation through 'digital first responders. https://news.un.org/en/story/2020/05/1064622.

17. Takian A, Kiani MM, Khanjankhani K. COVID-19 and the need to prioritize health equity and social determinants of health. International Journal of Public Health. 2020:1-3.

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