#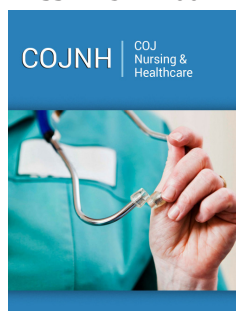 Harmful Effect of Fake News on the Population and Nursing Staff Health During the Covid-19 Pandemic: A Narrative Review

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Abstract

The epidemiologic crisis caused by the SARS-CoV-2 virus has shown that international and regional health institutions are not prepared to identify, prevent, control, and treat a new respiratory disease with high potential for contagion, morbidity, and mortality. The lack of knowledge about Covid-19 mechanisms has led health authorities to adopt general measures to control its spread, like masks use, distance and social isolation. The nation's unpreparedness to manage the pandemic has created uncertainties, fear, and panic in society. For this reason, people have started to engage and share more information on their social media. This facilitated the propagation of fake news, primarily about Covid-19's dissemination, prevention, and treatment. The damage caused by fake news discredited science, decrease the acceptance of protective measures, and enhance the aggressiveness against health professionals, especially in nursing. The increase of aggressions associated with the fear of contamination, bad work conditions, and social isolation has caused a rise in the cases of emotional diseases among nursing professionals. This reality is worrying because these specialists are the ones in the front line of patients' treatment. So, the bigger the number of nurses sick leave from work, the lower will be the quality of attendance in health unities. This reinforces the idea that fake news is a public health issue and must be watched and controlled with seriousness. Moreover, the nations need an action plan to provide updated scientific information in an easy understanding for society.

Introduction

The Covid-19 pandemic has been responsible for one of the world's worst public health crises. Between January 2020 and January 2022, it has been registered approximately 370 million positive cases with an estimated 5.6 million deaths [1]. The main causes of this critical epidemiological situation were:

i) High transmissibility, morbidity, and lethality capacity of SARS-CoV-2 virus.

ii) The lack of structure and planning of nations to identify and contain pandemics.

iii) Material and physical deficiency of world's health system to attend a high number of infected patients with the same disease.

As if that were not enough, the lack of information about the causes and effects of a recently discovered illness has led people with poor technical and scientific knowledge, to feel comfortable and in the right to share unfounded information about prevention methods and treatment for Covid-19. Making the situation even worse, this inappropriate conduct of propagating unfounded facts has been adopted not only by individuals without notoriety but also by people with high persuasion power, such as digital influencers and politicians

[2-6]. The desire to expose what people think about the content they do not understand, associated with the facility of sharing information on social media, potentiated the disinformation related to the pandemic. As a consequence, this has reduced the impact of guidance measures about Covid-19's prevention and control carried out by licensed professionals. In light of this, sharing fake news has become one of the primary barriers to the pandemic end [2,3,6-10].

The fake news related to Covid-19 is a reality worldwide. And it has been compared to a pandemic due to its intense and harmful incidence to the general population [3,4,9,11]. For this reason, international health institutions and professionals from different fields have mobilized to combat the dissemination of fake news and improve the health education of the world population. Unfortunately, the Covid-19 disinformation is propagated by health experts who are not up to date, ignore scientific evidence, or are based on religious, party-political, and even cultural beliefs [4,7,8,12]. It is worrying because these professionals have social respect and credibility for acting against the diseases. So, having specialists propagating fake news, based on pseudoscience, is more harmful to public health than those shared by laypeople who do not have a bond of social affection [3,9]. In ideal conditions, the communication about health between authorities and society must be objective, precise, transparent, based on evidence, and spread in an easy understanding. Instead, the world passes to a dispute of "who convinces more", where beliefs, ideologies, and pseudoscience overlap scientific evidence. In the face of this tug-of-war, society has been split into a hostile environment loaded with uncertainties and mistrust. This chaotic situation intensifies the aggressiveness and those who suffer more are the ones in the front line. Therefore, it is not surprising that the increase of fake news about Covid-19 has a direct relationship with the enhancement of violence against health professionals [9,11-13]. In a non-pandemic context, the violence in the work environment was always a reality frequently experienced by health professionals, mainly in emergency service and polyclinics. The hostility to these workers may happen in the form of verbal abuse, psychological violence, physical aggression, or even sexual abuse. In most cases, it is caused by health professionals' patients and their companions [11,14,15]. In this scenario, these professionals who are in touch with these people are the ones most exposed to violence. So, it is common to find nurses who already suffered some type of aggression in the work environment, especially among women [16-19]. If this reality (i.e. aggression related to the patient against health professional) is frequent in non-pandemic times, it is expected that this situation tends to be worse in periods of uncertainty, fear, and panic, with disinformation being propagated by fake news [20].

Since the beginning of the pandemic crises of SARS-CoV-2, the disrespect of civilians to nurses of the front line rises exponentially. The aggression that before was restricted to the health care environment has begun to be observed on public roads, and sometimes while these professionals were commuting to work [20-22]. From a humanitarian perspective, this kind of attitude is unacceptable. After all, how does someone attack professionals who expose themselves to a risk to take care of patients and, somehow, minimize the impacts of a pandemic? To answer this question is necessary to comprehend that one action is conditioned to emotions (e.g. fear and anger) and individuals perceptions (e.g. right and wrong) which are influenced by a set of environmental (e.g. Intrinsic: hormonal bioavailability and cardiac frequency; extrinsic: Hot weather and sound pollution) and sociocultural factors (e.g. fake news propagation and religious or party-political beliefs). This broader point of view has made it possible to identify fake news as one of the most predictors to the rise of aggression against nursing professionals during the Covid-19 pandemic [3,4,20]. The noxious effects of fake news on these workers are not limited to physical damage. Since the beginning of the pandemic, it has been observed an enhance of cases of nurses with emotional disturbs, such as anxiety, depression, post-traumatic stress, and burnout syndrome [13,22,23]. Among the main factors associated with damage to mental health in the nursing team during the Covid-19 pandemic are:

i)   Social isolation (primary from relatives and friends);

ii)   The worrying related to the risk of contaminating and transmitting the disease to others.

iii)   The Responsibility in the processes of the patient treatment;

iv)   The Job overcharge dues to the insufficient number of employees and work overtime.

v)   The Uncertainty about the availability of individual protection equipment;

vi)   Discrimination and resistance to prevention measures and treatment to community people [13,20,23-28]. In the face of this list, social behavior (i.e., vi item) seems to be the only predictor that may be influenced by fake news because disinformation about health treatment induces error and intolerance. However, if it is considered that the lack of adherence to prevention and treatment measures is related to the rise of Covid-19 cases, it is possible to comprehend that fake news is associated with other predictors [3,7,8,11].

To reduce the negative impact of fake news on public health, large companies and government institutions are joining efforts to identify and censor lying information linked to Covid-19 treatment procedures [29]. Politicians and health professionals must disseminate health prevention and treatment information based on consistent and up-to-date scientific evidence [2,3,12]. Health professionals, especially nurses, must use the capacity to identify and answer fake news as their main defense. For this, it is necessary to acquire up-to-date technical-scientific knowledge, and also a great critical and persuasive capacity to the world comprehension. With these attributes, it is easier for nursing professionals and workers from health services to deconstruct the disinformation rooted in community [30]. Nursing leaders must act consciously and humanly over the organization and logistics of the

work environment to facilitate the psychological adaptation of the nursing team who act in the front line against Covid-19 [16].

Final Considerations

The fake news of prevention and treatment of diseases is extremely damaging to world public health and impact directly the physical and mental well-being of health care workers. For this reason, the combat to this action deserves special attention from leaders, international institutions, information companies, and social media from all nations. Tracking and blocking the posts and punishing the responsible for these actions seems not to be enough to reduce the impact of fake news on public health. Above all, international and local health institutions must have prevention and treatment plans for pandemic times. Politicians and health professionals, mainly physicians, must communicate with society without any ideological bias and their speech must be easy to understand and based on up-to-date scientific data. Frontline professionals of pandemic combat, including nurses, must have the technical, scientific, and persuasive capacity to clarify to the community the epidemiological reality in which they find themselves. Leaders from the health team must propitiate a favorable work environment to maintain their team's mental health. In other words, nations need an action plan for both monitoring and controlling diseases, the pandemic, and fake news, as well as providing updated and consistent scientific information in an easy understanding for society.

References

1. Hannah R, Edouard M, Lucas RG, Cameron A, Charlie G, et al. (2020) Coronavirus Pandemic (COVID-19).

2. Yamey G, Gonsalves G (2020) Donald Trump: A political determinant of covid-19. BMJ 24: 1-2.

3. Galhardi CP, Freire NP, Minayo MCS, Fagundes MCM (2020) Fato ou Fake? Uma análise da desinformação frente à pandemia da Covid-19 no Brasil. Cien Saude Colet 25(2): 4201-4210.

4. Moscadelli A, Albora G, Biamonte MA, Giorgetti D, Innocenzio M, et al. (2020) Fake news and Covid-19 in Italy: Results of a quantitative observational study. Int J Environ Res Public Health 17(16): 5850.

5. Ricard J, Medeiros J (2020) Using misinformation as a political weapon: COVID-19 and bolsonaro in Brazil. HKS Misinformation Rev 1(2): 1-7.

6. Linden S, Roozenbeek J, Compton J (2020) Inoculating against fake news about COVID-19. Front Psychol 11.

7. Apuke OD, Omar B (2021) Social media affordances and information abundance: Enabling fake news sharing during the COVID-19 health crisis. Health Informatics J 27(3).

8. Montagni I, Ouazzani-Touhami K, Mebarki A, Texier N, Schück S, et al. (2021) Acceptance of a Covid-19 vaccine is associated with ability to detect fake news and health literacy. J Public Health 43(4) :695-702.

9. Vasconcellos-Silva PR, Castiel LD (2020) COVID-19, fake news and the sleep of communicative reason generating monsters: The narrative of risks and the risks of narratives. Cad Saude Publica 36(7):1-12.

10. Santoso YW (2020) Deliberate negligence: Bolsonaro and Brazil's failure in response to COVID-19 pandemic. J Glob Strateg 14(2): 315.

11. Atehortua NA, Patino S (2021) COVID-19, a tale of two pandemics: Novel coronavirus and fake news messaging. Health Promot Int 36(2): 524-534.

12. Matos RC (2020) Fake news in face of the COVID-19 pandemic. Vigilância Sanitária debate 8(3): 78-85.

13. Stelnicki AM, Carleton RN, Reichert C (2020) Nurses mental health and well-being: COVID-19 Impacts. Can J Nurs Res 52(3): 237-239.

14. Mento C, Silvestri MC, Bruno A, Muscatello MRA, Cedro C, et al. (2020) Workplace violence against healthcare professionals: A systematic review. Aggress Violent Behav 51.

15. Alkorashy HAE, Al Moalad FB (2016) Workplace violence against nursing staff in a Saudi University hospital. Int Nurs Rev 63(2): 226-232.

16. Zhang Y, Wei L, Li H, Pan Y, Wang J, et al. (2020) The Psychological change process of frontline nurses caring for patients with COVID-19 during its outbreak. Issues Ment Health Nurs 41(6): 525-530.

17. Child RJH, Mentes JC (2010) Violence against women: The phenomenon of workplace violence against nurses. Issues Ment Health Nurs Feb 31(2): 89-95.

18. Cannavò M, La Torre F, Sestili C, La Torre G, Fioravanti M (2019) Work related violence as a predictor of stress and correlated disorders in emergency department healthcare professionals. Clin Ter 170(2): 110-123.

19. Freitas RJM, Pereira MF do A, Lima CHP, Melo JN, Oliveira KKD (2017) A violência contra os profissionais da enfermagem no setor de acolhimento com classificação de risco. Rev Gaúcha Enferm 38(3): 1-9.

20. McKay D, Heisler M, Mishori R, Catton H, Kloiber O (2020) Attacks against health-care personnel must stop, especially as the world fights COVID-19. Lancet 395(10239): 1743-1745.

21. Rebello A (2020) Health professionals are attacked on the way to hospitals in São Paulo. News, Brazil 20.

22. Semple K (2020) Afraid to be a nurse: Health workers under attack. New York Times, USA.

23. Zheng R, Zhou Y, Fu Y, Xiang Q, Cheng F, et al. (2021) Prevalence and associated factors of depression and anxiety among nurses during the outbreak of COVID-19 in China: A cross-sectional study. Int J Nurs Stud 114.

24. Miranda FMD, Santana L de L, Pizzolato AC, Saquis LMM (2020) Working conditions and the impact on the health of the nursing professionals in the context of covid-19. Cogitare Enfermb 25.

25. Souza NVD, Carvalho EC, Soares SSS, Varella TCMYML, Pereira SRM, et al. (2021) Nursing work in the COVID-19 pandemic and repercussions for workers' mental health. Rev Gauch Enferm 42.

26. Zhang SX, Liu J, Jahanshahi AA, Nawaser K, Yousefi A, et al. (2020) At the height of the storm: Healthcare staff's health conditions and job satisfaction and their associated predictors during the epidemic peak of COVID-19. Brain Behav Immun 87: 144-146.

27. Chen X, Zhang SX, Jahanshahi AA, Alvarez-Risco A, Dai H, et al. (2020) Belief in a COVID-19 conspiracy theory as a predictor of mental health and well-being of health care workers in Ecuador: Cross-sectional survey study. JMIR Public Heal Surveill 6(3).

28. Smallwood N, Pascoe A, Karimi L, Willis K (2021) Moral distress and perceived community views are associated with mental health symptoms in frontline health workers during the COVID-19 pandemic. Int J Environ Res Public Health 18(16): 8723.

29. Limaye RJ, Sauer M, Ali J, Bernstein J, Wahl B, et al. (2020) Building trust while influencing online COVID-19 content in the social media world. Lancet Digit Heal 2(6): 277-278.

30. Chinedu AC (2021) Unmasking fake news and propaganda in the healthcare system: Nurses responsibility for patients' safety. African J Heal Nurs Midwifery 4(4): 52-58.