

# Production of a telehealth bulletin during the pandemic: an experience report



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## Abstract

*This paper addresses the experience of undergraduate nursing students at UFMG who performed several telehealth actions during the COVID-19 pandemic. Telehealth is the incorporation of health-related services and information through information and communication technologies (ICTs). In the context of the time, the dissemination of fake news was considered an infodemia, emerging the need to make reliable information available in the media communication, mainly on the internet. The article describes the construction of information actions related to the context of the new Coronavirus Sars-CoV-2 pandemic.*

**Keywords:** Epidemiological Bulletin; Telehealth; Telenursing; Pandemic; Covid-19.

## Resumen

*Elaboración de un boletín de telesalud durante la pandemia: relato de una experiencia.*

*Este trabajo aborda la experiencia de estudiantes del curso de graduación en enfermería de la UFMG que realizaron diversas acciones de telesalud durante la pandemia COVID-19. La telesalud es la incorporación de servicios e información relacionados con la salud a través de las tecnologías de la información y la comunicación (TIC) y, como en el contexto de la época, la difusión de noticias falsas se consideraba una infodemia, surgió la necesidad de poner a disposición información confiable en los medios de comunicación, principalmente en Internet. El artículo describe la construcción de acciones de información relacionadas con el contexto de la nueva pandemia de Coronavirus Sars-CoV-2.*

**Palabras clave:** Boletín Epidemiológico; Telesalud; Teleenfermería; Pandemia; COVID-19.

## Resumo

*Elaboração de um boletim de telessaúde durante a pademia : relato de uma experiencia.*

*Este trabalho aborda a experiência de alunos do curso de graduação de enfermagem da UFMG que realizaram várias ações de telessaúde durante a pandemia de COVID-19. Telessaúde é a incorporação de serviços e informações relacionadas à saúde por meio de tecnologias de informação e comunicação (TICs), e visto que no cenário da época a disseminação de fake news foi considerada uma infodemia, teve-se a necessidade de fornecimento informações confiáveis em meios de comunicação, principalmente na internet. O artigo descreve a construção das ações informativas relacionadas com o contexto da pandemia do novo Coronavirus Sars-CoV-2.*

**Palavras-chave:** Boletim Epidemiológico; Telessaúde; Telemedicina; Pandemia; COVID19.:

## INTRODUCTION

On December 31, 2019, the new Coronavirus was discovered after cases registered in China<sup>1</sup>, drawing the world's attention to the unknown virus, which had been infecting people in the city of Wuhan. On February 26, 2020, the first case was confirmed in São Paulo, Brazil<sup>1</sup>. On March 11, the World Health Organization (WHO) declared a pandemic of the new Coronavirus<sup>2</sup>, causing Brazil to subsequently adopt the measures of isolation and social distancing, defended by the WHO as a way to prevent the spread of the disease.

In this context, we are also facing another important public health problem: the dissemination of false news on the internet<sup>3, 4</sup>. Recently, WHO General Director Tedros Adhanom Ghebreyesus made the following statement: "We are not just fighting an epidemic; we are fighting an infodemic"

. The dissemination of false rumors hinders the filtering of correct information<sup>3</sup> and its dissemination was considerably more significant compared to true information, being more shared and reaching significantly more people<sup>5</sup>.

False news is based on the spread of disinformation, which is deliberately shared to mislead or cause harm. This harm is mainly noticed in information related to health<sup>3, 6</sup>.

For this reason, the phenomenon has raised concern, as it can lead to serious consequences, such as the recent outbreak of methanol contamination in Iran. The dissemination of news that associated the consumption of alcoholic beverages with the prevention of COVID -19 led to increased consumption of these products. However, the sale and consumption of these inputs are not legal in the country, which has led to demand on the black market. Such products are usually produced with methanol or industrial alcohol, which are toxic and inappropriate for human consumption. As a result, more than 2,500 Iranians are believed to have suffered methanol poisoning, with around 500 deaths<sup>7</sup>.

Therefore, it is important to emphasize the importance of reliable information to mitigate the effects caused by misinformation, and a possible and effective strategy in the current context is the use of telehealth resources<sup>9</sup>.

Telehealth is the incorporation of health-related services and information through information and communication technologies (ICTs)<sup>1</sup>. Therefore, it is based on telematics and can be defined as a science that studies the manipulation and use of information through the combined use of the computer, its accessories, and means of communication.

According to Piropo and Amaral<sup>11</sup>, telehealth represents collective health an advance in access to quality resources in the health area, and the incorporation of technologies is a political and strategic instrument in the execution and planning of health actions.

Thinking about the creation of a tool to help in the planning and execution of health actions, the Telenursing Project of the School of Nursing of the Federal University of Minas Gerais (EEUFMG) created the "*Boletim Momento Telessaúde*" (Telehealth Moment Bulletin), to be actively employed in the learning process of Health professionals.

After the creation of the *Boletim Momento Telessaúde* in the second half of 2017, telenursing has been using this technological resource to carry out bulletins according to the demands presented by professionals, in the care and educational dimension. Based on the moment we live in, during the COVID-19 pandemic, two bulletins were prepared, which show how much it is possible to improve the response of the health system, using a resource that will present scientific information that can contribute to the fight against the new Coronavirus SARS-CoV-2.

The bulletins were produced by undergraduate students in Nursing at EEUFMG, linked to the extension project "*Boletim Momento Telessaúde*". Edition number 9 entitled "The virus that stopped the world" brings together in its composition, interviews in the context of COVID-19 with specialist professionals, who elucidate and discuss the general panorama of the pandemic, the impact of COVID-19 on pregnant women and newborns, and how to preserve mental health at this moment. Edition number 10 entitled "Nursing in the fight against COVID-19", produced to honor professionals at the Brazilian Nursing Week, brings together discussions on the working conditions of nurses during the pandemic, the experience report of nurses in primary health care and intensive care, as well as a poem written by a nurse. The two editions mentioned have a section reserved for the Second Formative Opinion (SFO), which is a question answered based on the literature, by a tele-content consultant. The Bulletin also has a page with relevant indications for going deeper into the proposed topic. The article aims to describe the experience of building the editions of the newsletters related to the context of the new Coronavirus Sars-CoV-2 pandemic.

## METHOD

In the first stage, we created a team of six students from different periods of the undergraduate nursing course under the guidance of the coordination of the Project *Boletim Momento Telessaúde*. We also had the support of a professional from the Communication Sector at EEUFMG as editor-in-chief, a children's writer, author of the book "Férus, o cão mais bravo da cidade" and a plastic artist, for graphic art.

The activities took place between April 4<sup>th</sup> and 30<sup>th</sup>, 2020.

After the creation of the team, it was proposed to prepare a bulletin addressing COVID-19, which was accepted by the students, who soon began to suggest relevant topics, to bring information about the COVID-19 pandemic, which at the time was at the beginning and had little information. After a survey and analysis, we divided the themes among the students, who were responsible for researching information and questions about the topic in the context of the new Coronavirus pandemic. Each topic was answered by a health care professional.

Students were also responsible for conducting interviews, using social media text messages, and voice and video calls. After the interview, the students transcribed and sent the document to the project coordination, who organized them so that the second stage of creation could be continued.

In the second stage, the team met to edit and lay out the bulletins. This meeting took place on the afternoon of April 30, lasting approximately 7 hours, and the WHO recommendations for distance, constant use of masks, and alcohol gel were met.

### Theoretical reference

In moments of public health emergency and experiencing disease outbreaks, education and health promotion assume an even more relevant role, being essential for an active response to these situations. Also, they allow the involvement with the population in general, who in these moments need professional guidance and assistance<sup>12</sup>.

Health education is a modifying practice and is characterized by the development of an exchange relationship between the individuals involved, considering the educator, students and knowledge. In addition, they offer the possibility of interaction between the individuals, favoring learning to be a dynamic and shared process<sup>13</sup>.

The internet is one of the main communications and education tools today, and it has been widely exploited for distance education<sup>13</sup>. Access to this tool enables us to reach numerous sources of information, and health professionals use it to convey information about health problems, prevention, promotion, and education. Thus, it has been configured as an important instrument for health activities, including educational ones, enabling the dissemination of information based on scientific evidence<sup>13</sup>.

The transmission of quality information is essential for today's society. The ICTs enable the exchange of information and the acquisition of knowledge. They have been used frequently in the health area, and are used to assist in decision-making, cooperating to improve the quality of care, to scientific development, and to improve the country's policies<sup>14</sup>.

All health activities performed through ICTs comprise the set called telehealth, which includes the provision of communication and health education services<sup>14, 15</sup>. The use of these technologies has many benefits, and the use of ICTs in health provides access to individuals and municipalities that are geographically distant or lack these services, increasing the scope and access to health<sup>14, 16</sup>. Thus, the use of telehealth helps in complying with the basic principles of the Unified Health System (*Sistema Único de Saúde* - SUS)<sup>14, 15</sup>.

One of the telehealth tools is teleconsulting. It is a consultation that is carried out between health professionals, workers and teleconsultants, and aims to clarify doubts related to the clinic, the professionals' work process, or man-

agement. The modality can be performed synchronously, through real-time consulting, or asynchronously, when performed by text and subject to response at a later time<sup>17, 18</sup>.

In the Telenursing Project, the Second Formative Opinion (SFO) is carried out based on teleconsultations, with the most relevant questions being selected. The answers are systematized and based on scientific literature, supported by the best and most recent clinical evidence<sup>16, 18, 19</sup>. SFOs provide quality information to health professionals and students, ensuring quality content to those interested. In this way, it contributes to the redefinition of knowledge and to improve the quality of health<sup>19</sup>.

The newsletter "Momento Telessaúde" is a health education strategy based on the dissemination of information based on scientific evidence and the approach of relevant public health issues. In addition, it contributes to the process of learning and resignifying the knowledge of the students involved in its creation and elaboration.

## RESULTS AND DISCUSSION

The first point to be highlighted is the theme addressed in the bulletins, indicating the one that emerges from the main discussions in health. The edition "The virus that stopped the world" addressed issues that the population had the greatest doubts about. Thus, we decided to address the general panorama of the pandemic, so we could contextualize the scenario of the disease in the city. To this end, we invited Unai Tupinambás, a professor from the Department of Clinical Medicine of the Faculty of Medicine, UFMG, who described the scenario that public health was in, emphasizing the need and the results that social isolation was bringing to control the spread of the virus, the measures that were being taken, and the analysis of the impacts of the coronavirus on society.

The topic of pregnancy and lactation was addressed through the doubts registered in teleconsultations. This theme was also chosen because pregnant women, lactating women, and newborns are considered very vulnerable to diseases and belong to risk groups for the main diseases.

The last theme, addressed by Professor Adriana Drummond, from the Department of Occupational Therapy at UFMG, was raised from the need to show how excessive information can influence mental health at a time that affects the lives of the population as a whole.

With this approach, the issue of the *Boletim Momento Telessaúde* focused on the dissemination of accurate and secure information, as the time was of a lot of speculation and little information about the virus, given the global novelty.

The tenth edition of the bulletin entitled "Nursing in the fight against COVID-19" was launched on May 12<sup>th</sup>, International Nursing Day, to pay homage to professionals in the class. The focus of this bulletin was to show the working conditions of nurses during the pandemic, who dealt with the feeling of insecurity and fear, lack of personal protective

equipment (PPE), long working hours, some of them away from their families, and daily witnessing the death of his patients. Therefore, the first interview sought to bring an overview of these conditions, so that later reports of the practice of some professionals could be addressed.

The first report is an interview with a primary care nurse, who describes the adaptations in the work process to assist people with suspected COVID-19. The second report talks about the work process of a nurse in London who detailed how her first contact was in caring for people with COVID-19, until the moment she and her fellow nurses contracted the virus.

The Second Formative Opinion (SFO) of this bulletin answered the main guidelines for the detection of a suspected case of Coronavirus. The teleconsultant was a nursing student, who took a training course offered by the Faculty of Medicine at UFMG to answer questions from the population and professionals about COVID-19.

In addition, this issue brought a poem entitled “Heroes Suffer” written by a nurse, and a brief report on the changes that social isolation brought to the life of a student in the Nursing Undergraduate Course at EEUFMG.

In general, society is the target audience, and helping to combat false news is the main objective of the newsletter. We also obtained the democratization of information and the possibility of bringing knowledge to the population, all health professionals, and other interested parties. We honor the professionals in the class who were on the front lines of fighting the virus. The production of the materials surprised us and was a source of great pride for the team, as the bulletins were produced in such an atypical and limited time.

We noticed that during the entire creation process we faced fake news, wrong news, excess and scarcity of information in many cases, making the information passed on to us through the interviewees apply to ourselves, as we have always been exposed to the same situation, as well as the general public.

## CONCLUSION

From participating in the stages of creating the newsletter, it is clear how important scientific work is, not only for the result, but also for the planning and construction process, since from the project phases, we students extract the main information, and with this, we develop the necessary skills for the proper structuring of scientific work. Over time, we pay attention to each essential part, such as taking care of information and learning about the content covered in the work.

Furthermore, a feeling of “usefulness” for society emerged in the students. This generated the perception of how important research and science are for nursing care, as scientists provide the first information about any new disease, as well as vaccines and medicines to fight them.

We also noticed that the internet was the main com-

munication and interaction channel, and through it, we could carry out the entire research process, information collection, and the free dissemination of the material. The internet enables to search for reliable information sources such as scientific databases, enabling the dissemination of the knowledge produced, making it an important means of communication.

Finally, newsletters can be used as a source of continuing education for health professionals, for other readers and interested parties, and as a tool for the democratization of information, guiding them away from fake news.

## REFERENCES

1. Ministério da Saúde. Linha do Tempo Coronavírus [Internet]. Brasília, DF; 2020 [cited 2020 Jul 21]. Available from: <https://coronavirus.saude.gov.br/linha-do-tempo/>
2. UNA-SUS. Organização Mundial de Saúde declara pandemia do novo Coronavírus [Internet]. 2020 [cited 2020 Jul 21]. Available from: <https://www.unasus.gov.br/noticia/organizacao-mundial-de-saude-declara-pandemia-de-coronavirus>
3. Mesquita CT, Oliveira A, Seixas FL, Paes A. Infodemia, Fake News and Medicine: Science and The Quest for Truth. *International Journal of Cardiovascular Sciences* [Internet]. 2020 May [cited 2020 Jul 19];33(3):203–5. Available from: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S2359-56472020000300203&Ing=en&nr=iso](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S2359-56472020000300203&Ing=en&nr=iso)
4. Zarocostas J. How to fight an infodemic. *Lancet* [Internet]. 2020 Feb [cited 2020 Jul 23];395:625. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7133615/>
5. Vosoughi S, Roy D, Aral S. The spread of true and false news online. *Science*. 2018 Mar;359:1146–51.
6. Kanekar AS, Thombre A. Fake medical news: Avoiding pitfalls and perils. *Family Medicine and Community Health* [Internet]. 2019 Oct [cited 2020 Jul 23];7(4):1–4. Available from: <https://www.ncbi.nlm.nih.ez27.periodicos.capes.gov.br/pmc/articles/PMC6910766/>
7. Soltaninejad K. Methanol mass poisoning outbreak, a consequence of COVID-19 pandemic and misleading messages on social media. *Int J Occup Environ Med*. 2020;11(3):148–50.

8. Delirrad M, Mohammadi AB. New Methanol Poisoning Outbreaks in Iran Following COVID-19 Pandemic. Alcohol and alcoholism [Internet]. 2020 [cited 2020 Jul 19];0(0):1–2. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7239215/pdf/agaa036.pdf>
9. Dimer NA, do Canto-Soares N, dos Santos-Teixeira L, de Goulart BNG. The COVID-19 pandemic and the implementation of telehealth in speech-language and hearing therapy for patients at home: An experience report. Cogas [Internet]. 2020 [cited 2020 Jul 23];32(3):10–3. Available from: [https://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S2317-1782202000300401&lang=pt](https://www.scielo.br/scielo.php?script=sci_arttext&pid=S2317-1782202000300401&lang=pt)
10. Pereira CCA, Machado CJ. Telessaúde no Brasil – conceitos e aplicações. Ciência & Saúde Coletiva [Internet]. 2015 Oct [cited 2020 Jul 21];20(10):3283–4. Available from: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1413-81232015001003283&lng=en&nr=iso](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232015001003283&lng=en&nr=iso)
11. Piropo TG do N, Amaral HOS do. Telessaúde, contextos e implicações no cenário baiano. Saúde em Debate [Internet]. 2015 Mar [cited 2020 Jul 21];39(104):279–87. Available from: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0103-11042015000100279&lng=en&nr=iso](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-11042015000100279&lng=en&nr=iso)
12. Gray DJ, Kurscheid J, Mationg ML, Williams GM, Gordon C, Kelly M, et al. Health-education to prevent COVID-19 in schoolchildren: A call to action. Infectious Diseases of Poverty [Internet]. 2020 Jul [cited 2020 Jul 23];9(81):1–3. Available from: <https://idpjournal.biomedcentral.com/articles/10.1186/s40249-020-00695-2>
13. Cruz DIP, Dias RRD, Martins W da S, Gandolfi VF, Elizandro P. O uso das mídias digitais na educação em saúde. Cad da FUCAMP [Internet]. 2011;10(13):130–42. Available from: <http://www.fucamp.edu.br/editora/index.php/cadernos/article/view/215>
14. Lopes JE, Heimann C. Uso das tecnologias da informação e comunicação nas ações médicas a distância: um caminho promissor a ser investido na saúde pública. Journal of Health Informatics [Internet]. 2016;8(1):26–30. Available from: <http://www.jhi-sbis.saude.ws/ojs-jhi/index.php/jhi-sbis/article/view/364>
15. Nilson LG, Maeyama MA, Dolny LL, Boing AF, Calvo MCM. Telessaúde: Da Implantação Ao Entendimento Como Tecnologia Social. Revista Brasileira de Tecnologias Sociais [Internet]. 2018 [cited 2020 Jul 23];5(1):33–47. Available from: <https://pdfs.semanticscholar.org/eef4/35ef395572f57a3615b407fb77843ece7d07.pdf>
16. Nunes AA, Bava M do CGC, Cardoso CL, Mello LM de, Trawitzki LVV, Watanabe MG de C, et al. Telemedicina na Estratégia de Saúde da Família: avaliando sua aplicabilidade no contexto do PET Saúde. Cadernos Saúde Coletiva [Internet]. 2016 [cited 2020 Jul 23];24(1):99–104. Available from: [https://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1414-462X2016000100099&lang=pt](https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-462X2016000100099&lang=pt)
17. Ana A, Haddad E. Experiência Brasileira do Programa Nacional Telessaude Brasil. Gold book [recurso eletrônico]: inovação tecnológica em educação e saúde [Internet]. 2012 Nov;12–42. Available from: <http://www.telessaude.uerj.br/goldbook>
18. Ministério da Saúde. PORTARIA No 2.546, DE 27 DE OUTUBRO DE 2011. Diário Oficial da União [Internet]. 2011 Oct [cited 2020 Jul 23]; Available from: [https://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt2546\\_27\\_10\\_2011.html](https://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt2546_27_10_2011.html)
19. BVS Atenção Primária em Saúde. O que é SOF? [Internet]. [cited 2020 Jul 23]. Available from: <https://aps.bvs.br/segunda-opinioao-formativa/>

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