

Health education activities conducted by nursing staff in the context of COVID-19*Actividades educativas en salud desarrolladas por enfermería en el contexto de la COVID-19**Atividades educativas em saúde desenvolvidas pela enfermagem no contexto da COVID-19***Abstract**

This study aimed to present scientific literature regarding health education practices carried out by nursing professionals in the context of primary health care during the COVID-19 pandemic. It is an integrative literature review covering articles published between 2020 and 2024; the search was conducted in December 2024 in the LILACS and BDeF databases, guided by the following questions: "What were the impacts of the COVID-19 pandemic on health education activities carried out by nursing teams in primary health care?", "What were the main topics addressed with the population?", and "How did nursing professionals conduct health education?" The final sample consisted of 13 articles. Educational activities were identified focusing on women's health, child health, respiratory hygiene, social distancing, mental health, vaccination adherence, handwashing, and mask production, highlighting health education initiatives based on needs that emerged during the pandemic. Professionals require continuous training to combat the spread of misinformation, adapt to new technologies, and manage resource shortages, all of which make providing health education to the population a challenging task.

Descriptors: Health Education; Nursing; COVID-19; Primary Health Care; Collective Health.

Resumen

El objetivo fue presentar la literatura científica disponible sobre prácticas de educación para la salud desarrolladas por profesionales de enfermería en el contexto de la COVID-19, dentro del contexto de la atención primaria. Esta es una revisión bibliográfica integradora, con artículos publicados entre 2020 y 2024, buscados en diciembre de 2024 en las bases de datos LILACS y BDeF, guiados por las siguientes preguntas: "¿Cuáles son los impactos de la pandemia de COVID-19 en las acciones de educación para la salud desarrolladas por el equipo de enfermería en la atención primaria de salud?", "¿Cuáles son los principales temas construidos/desarrollados con la población?" y "¿Cómo actuaron los profesionales de enfermería para llevar a cabo la educación para la salud?" La muestra final consistió en 13 artículos. Identificamos acciones educativas enfocadas en la salud de la mujer, la salud infantil, la higiene respiratoria, el distanciamiento social, la salud mental, la adherencia a la vacunación, el lavado de manos y la producción de mascarillas, destacando acciones de educación para la salud basadas en las necesidades emergentes durante la pandemia. Los profesionales de la salud necesitan capacitación continua para combatir la propagación de la desinformación, adaptarse al uso de nuevas tecnologías y hacer frente a la escasez de recursos, lo que hace que la educación para la salud para la población sea un desafío.

Descriptores: Educación para la Salud; Enfermería; COVID-19; Atención Primaria de Salud; Salud Pública.

Resumo

Objetivou-se apresentar as produções científicas disponíveis na literatura acerca das práticas de educação em saúde desenvolvidas pela enfermagem considerando a COVID-19, no contexto da atenção primária. Trata-se de uma revisão integrativa de literatura, com artigos publicados entre 2020 e 2024, com busca realizada em dezembro de 2024 nas bases de dados LILACS e BDeF, sendo guiada pelas seguintes perguntas norteadoras: "Quais os impactos da pandemia da COVID-19 nas ações de educação em saúde desenvolvidas pela equipe de enfermagem na APS?", "Quais as principais temáticas construídas/desenvolvidas junto à população?" e "Como os profissionais de enfermagem atuaram para realizar a educação em saúde?" A amostra final foi composta por 13 artigos. Identificamos ações educativas voltadas para a saúde da mulher, a saúde da criança, a higienização respiratória, o distanciamento social, a saúde mental, a adesão à vacinação, a lavagem das mãos e a produção de máscaras, evidenciando ações de educação em saúde baseadas nas necessidades emergentes durante a pandemia. Os profissionais precisam de atualização permanente para combater as informações falsas que são veiculadas, adequar-se ao uso de novas tecnologias e lidar com a escassez de recursos, tornando a educação em saúde junto à população um desafio.

Descritores: Educação em Saúde; Enfermagem; COVID-19; Atenção Primária à Saúde; Saúde Coletiva.

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Introduction

The COVID-19 pandemic was caused by the SARS-CoV-2 virus, a novel coronavirus first identified in the city of Wuhan, Hubei Province, China, in December 2019. This novel coronavirus is responsible for causing COVID-19, a disease that spread rapidly and became a global pandemic¹.

In 2020, after the World Health Organization (WHO) declared COVID-19 a pandemic and a public health issue, it issued recommendations aimed at limiting the virus's spread; health education gained significant recognition for its capacity to contribute to changing behaviors that pose a risk for the transmission and spread of the disease¹.

Health education is the educational process of constructing health-related knowledge that aims to foster the population's grasp of the subject matter and contributes to increasing individuals' autonomy in their own care².

Health education activities cover a variety of topics, always tailored to the specific context and needs. They can be conducted individually, during consultations and procedures, or in a group setting, focusing on common health conditions such as groups for pregnant women or individuals with diabetes, hypertension, and tuberculosis³.

These actions are carried out at all levels of healthcare, particularly within Primary Health Care (PHC), which is considered the main entry point to the Unified Health System (SUS). Due to its extensive reach, PHC can identify issues relevant to the population, thereby contributing to the management of health promotion initiatives.

Health education practice is a multiprofessional endeavor; however, it stands out as an intrinsic component of the daily work of nursing professionals. This centrality stems from the continuous proximity these professionals maintain with health service users, enabling them to identify individual, family, and collective needs. Through attentive listening and the bonds established, they can devise and implement educational strategies that effectively and contextually address these needs. Furthermore, nursing professionals play a fundamental role in care, guided by a holistic perspective and the adoption of integrated practices that promote health in a broad sense.

The COVID-19 pandemic brought about significant changes in Primary Health Care units and impacted the health education activities carried out by nursing teams, as strict measures, such as social distancing and isolation, were imposed, alongside changes in work processes that led to an increased workload amidst high service demands and exhausting shifts⁴. As a result, there was a change in the care provided by nursing staff to users⁵, which emphasizes the importance of studies on the subject.

Considering the pandemic scenario caused by COVID-19, reflections are emerging regarding transformations in health promotion practices, particularly within Primary Health Care (PHC). The work of nursing teams, historically central to health education, has been shaped by new challenges and strategies. In this context, it is relevant to investigate the pandemic's impact on these activities, the topics prioritized with the population, and the

approaches adopted. Understanding these aspects makes it possible to identify both the potential and the limitations faced by professionals.

In this regard, the present study aims to present scientific literature regarding health education practices carried out by nursing professionals in the context of primary health care in relation to COVID-19.

Methodology

This is an integrative literature review (ILR) that sought to analyze the bibliographic output of a specific thematic area within a defined timeframe, providing an overview of a specific topic and highlighting new ideas, methods, and subthemes that have received greater or lesser emphasis in the selected literature⁶.

This study method consists of six distinct stages: 1) identification of the problem topic for the review; 2) definition of inclusion and exclusion criteria for studies; 3) definition of the information to be extracted; 4) evaluation of the studies included in the review; 5) interpretation of the results; and 6) presentation of the review⁷. Initially, the research problem related to theoretical reasoning was identified, based on definitions already learned by the researcher.

The guiding questions for this review are: "What were the impacts of the COVID-19 pandemic on health education activities carried out by the nursing team in Primary Health Care?", "What were the main topics addressed by nursing staff with the population during the COVID-19 pandemic?", and "How did nursing professionals operate, considering the facilitators and challenges involved in conducting health education in Primary Health Care during COVID-19?".

The search was conducted in December 2024 via the Virtual Health Library (VHL), using the Latin American and Caribbean Health Sciences Literature (LILACS) and Nursing Database (BDEnf) databases, with the following Health Sciences Descriptors/Medical Subject Headings (DeCS/MeSH): "Health Education," "Nursing," "Primary Health Care," and "COVID-19".

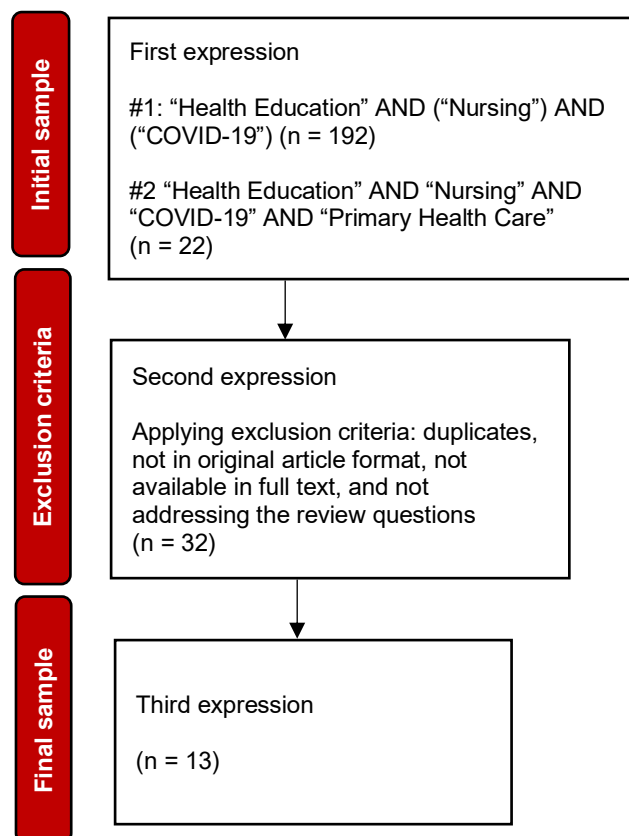
The inclusion criteria used were publications from 2020 to 2024 (using the declaration of the COVID-19 pandemic as the timeframe); texts in the form of scientific articles available in full; and languages including Portuguese, English, and Spanish. Exclusion criteria comprised articles published before 2020, duplicates across databases, articles in other languages, and dissertations, theses, and reviews.

Data collection was carried out by reading the abstracts and assessing their suitability regarding the outlined research questions, following the database search strategies and applying the criteria, as illustrated in the flowchart (Figure 1), in accordance with PRISMA guidelines⁸.

Thematic analysis was employed, establishing two analytical categories based on the essence and similarity of the data, titled: "Educational themes addressed during the COVID-19 pandemic" and "Digital technology and social media in the health education process".



Figure 1. Flowchart of search mechanisms. Rio de Janeiro, RJ, Brazil, 2024



Results

The final sample consisted of thirteen articles that met all established research criteria (Chart 1). Of these, one was found in the LILACS database (7.69%), one in BDNF (7.69%), and eleven in both databases (84.62%). Regarding the year of publication, one was published in 2020 (7.69%), three in 2021 (23.08%), five in 2022 (38.47%), and four in

2023 (30.76%). As for the country of publication, most journals were from Brazil (eleven), followed by Chile and Costa Rica, with one from each. Regarding language, there were eight articles in Portuguese, three in English, one in Spanish, and one in all three languages (Portuguese, English, and Spanish).

Chart 1. Studies selected for review, categorized by authors/year/country, design, objectives, and contributions. Rio de Janeiro, RJ, Brazil, 2024

Study	Author/Year/Country	Design	Objective	Main contributions
S1 ⁹	Guedes et al., 2023 Brazil	Exploratory qualitative study	Analyze the potential of information technologies to support actions addressing COVID-19 in primary health care.	Social media and information technologies have facilitated work organization, health education, and communication between professionals and users.
S2 ¹⁰	Prado et al., 2022 Costa Rica	Descriptive, exploratory, retrospective, mixed-methods study	Highlight the health education activity topics most accessed by Brazilians during the COVID-19 pandemic.	It identified the health education topics most sought after by the population, contributing to the planning of more targeted educational strategies.
S3 ¹¹	Pereira et al., 2021 Brazil	Experience report	Report the strategies developed to ensure the continuity of the influenza and measles immunization process during the pandemic.	Capacity to reorganize Primary Health Care services to ensure the continuity of immunization.
S4 ¹²	Oliveira et al., 2023 Brazil	Qualitative exploratory study	Identify the Information and Communication Technologies used by Primary Health Care nurses during COVID-19.	The use of ICTs, especially WhatsApp®, as a tool for communication and continuity of care.
S5 ¹³	Silva et al., 2022 Brazil	Qualitative study	Understand the use of health technologies and virtual social networks in the daily lives of Primary Health Care professionals during the pandemic.	The relevance of digital technologies and social media for communication and the strengthening of health initiatives.
S6 ¹⁴	Silva et al., 2022 Brazil	Qualitative study	Understand the use of technologies in the process of empowering nursing practices in Primary Health Care during the pandemic.	Technologies have contributed to strengthening professional autonomy and enhancing the quality of nursing practices.
S7 ¹⁵	Rios et al., 2020 Brazil	Experience report	Report the strategies for addressing COVID-19 developed by a Primary Health Care center.	It presented successful experiences in reorganizing work processes and care delivery.
S8 ¹⁶	Alves et al., 2023 Brazil	Reflective study	Reflect on the impacts of the pandemic on the implementation of cervical cancer prevention strategies in primary health care.	Effects of the pandemic on preventive actions and the need to strengthen tracing strategies following the health crisis.



S9 ¹⁷	Curvo et al., 2021 Brazil	Experience report	Describe a proposal for the production and distribution of masks to the at-risk population, accompanied by an educational video and infographic.	The potential of educational technologies to promote biosafety and health education during the pandemic.
S10 ¹⁸	Maciel, 2021 Brazil	Editorial	Discuss the nursing profession's commitment to health education during the COVID-19 pandemic.	The importance of the educational role of nursing in addressing the pandemic and disseminating reliable information.
S11 ¹⁹	Kaufmann et al., 2023 Brazil	Qualitative study	Understand nurses' perceptions regarding the repercussions of the pandemic on the performance of cervical cancer screening.	It highlighted barriers imposed by the pandemic on cervical cancer screening and their impacts on prevention.
S12 ²⁰	Pinilla Hormazabal et al., 2022 Chile	Experience report	Promote family health during the pandemic using online puppets.	It demonstrated an innovative health education strategy mediated by digital technology, expanding the reach of educational nursing initiatives.
S13 ²¹	Guareschi et al., 2022 Brazil	Experience report	Report the experience of a postpartum nursing consultation with a refugee woman during the COVID-19 pandemic.	It highlighted the importance of transcultural care and health education for vulnerable populations in the context of the pandemic.

Considering the formulated research question, the factors extracted from the texts were grouped and presented above; for the purpose of discussion, they were divided into categories related to the most prominent themes and the use of technologies and social media in the educational process during COVID-19.

Discussion

Educational themes developed during the COVID-19 pandemic

The topics addressed in health education initiatives during the COVID-19 pandemic reveal an overview of the areas deemed priorities by health teams, enabling an analysis of how well these strategies met the population's actual needs within the context of a health crisis. This understanding is crucial for evaluating the effectiveness of the educational practices implemented and for informing the formulation of strategic plans that are more effective and aligned with the principles of health promotion and equity in care, as advocated by SUS guidelines and scientific literature.

Among the topics, the following stood out: preventive measures during the pandemic, signs indicating coronavirus infection, and protocols for a positive COVID-19 result¹⁰; importance of immunization against other diseases^{11,18}; respiratory hygiene, social distancing, and mental health¹⁴; proper use of masks¹⁷.

It was observed from the articles that, despite the existence of barriers influencing the population's health-related behavior, health education activities were a fundamental resource during that period¹⁰. This is because, without these activities, it would not be possible to reach and mobilize the population regarding the risks associated with COVID-19 and the necessary precautions, nor to foster self-care and an understanding of the severity of the disease and the importance of preventive strategies.

The pandemic's impact on women's health highlighted the role of health education as a tool for raising awareness, given that access to services was restricted to implement infection prevention measures, leading to the postponement of examinations and unscheduled visits, particularly cervical cancer screening, in accordance with recommendations from the National Cancer Institute^{16,19}.

The interruption of the cervical cancer prevention program had a negative impact on health promotion and women's health-seeking behavior. As a strategy, health education activities were conducted solely on an individual basis, during nursing consultations, whenever possible, or via teleconsultation. In the articles, Community Health Agents (CHAs) emerge as facilitators of health education due to their close relationship with the community and their understanding of the population's actual needs. They serve as a vital link for the success of these initiatives, supported by training provided by Primary Health Care (PHC) nurses. Furthermore, they have enabled the dissemination of guidance regarding genital symptoms, prevention, self-care, monitoring for signs and symptoms of disease, and treatment based on clinical indications¹⁶.

Strategies employed during child health nursing consultations amidst the COVID-19 pandemic are identified, noting families' apprehension about continuing children's health monitoring at primary healthcare units due to the risk of infection²¹.

In this context, the need for health services to adapt to meet the demands of this population becomes evident. Strategies adopted by nurses include the production of educational materials for online sharing via social media⁹. Estas continuam informações sobre cuidados com a criança para as famílias. Furthermore, the institution used a mobile phone with the WhatsApp® app, which facilitated contact with families. Through this channel, informational leaflets were sent after consultations, allowing families to review the information¹².

These data align with a study on child health monitoring conducted in Santa Catarina, Brazil, involving Primary Health Care professionals. That study found that social distancing measures necessitated by the COVID-19 pandemic led to the emergence of strategies to maintain child health monitoring visits, such as active outreach via monthly phone calls to caregivers; encouraging the use of mobile apps and telephone appointment scheduling to prevent crowding at health facilities; providing concurrent care for postpartum women and newborn assessments; and conducting child health monitoring during non-elective appointments²².

Nevertheless, educational activities in Primary Health Care faced various challenges, particularly due to



professional practices that remained predominantly focused on technical and biological dimensions, contributing to the devaluation of health education practices among professionals¹⁵.

Among the educational activities, those conducted in waiting areas were planned during team meetings and implemented by nurses from the Family Health Strategy (ESF) teams. The topics addressed included respiratory hygiene, social distancing, and mental health¹⁵.

The topics addressed regarding respiratory hygiene were particularly relevant at that time, given that COVID-19 is transmitted primarily through respiratory droplets; proper respiratory hygiene practices, such as covering the mouth and nose, are crucial for reducing the spread of the virus and were mandated by Law No. 13.979 of February 6, 2020, which established the requirement to wear masks during the pandemic²³.

Scientific output regarding social distancing also played a significant role in reducing transmission and protecting the most vulnerable segments of the public, as it fostered population awareness regarding the importance of preventive measures and the individual and collective roles in mitigating the pandemic¹⁷.

The COVID-19 pandemic has further heightened risk factors for mental health issues, including unemployment, financial insecurity, grief, and loss, making this a prominent topic that requires attention from health facilities. PAHO ensures that mental health is placed at the top of policy agendas and integrated across all sectors to address the worsening mental health situation in the Americas resulting from the COVID-19 pandemic¹⁰. The articles present mental health as a cross-cutting theme across the various educational approaches implemented during this period^{10,13,15,19}.

The rapid spread of information and the proliferation of news often contrary to science, known as "fake news", sparked panic among the public, who frequently did not know where to find accurate and reliable information; this prompted professionals to undertake educational initiatives focused on providing guidance and disseminating science-based information¹⁵.

The studies analyzed highlighted the bond between professionals and users as an essential element for adherence to preventive measures in the actions developed by primary health care professionals⁸, particularly in initiatives related to COVID-19, addressing issues such as social isolation and mask-wearing. Empathy in communication strengthens interpersonal ties between the professional and the service user, fostering the development of bonds. Thus, Primary Health Care has the potential to influence the population's health outcomes, given its proximity to people's lives, which facilitates the strengthening of bonds and trust with the community²⁴.

Health education aimed at ensuring uptake of influenza and measles vaccines was also essential during the COVID-19 pandemic, given that the Ministry of Health brought forward the national vaccination campaign for these diseases to March 2020 to reduce flu cases during the pandemic. Careful planning was required to ensure the

strategy was effective and could reach a large segment of the population. In devising strategies to achieve satisfactory vaccination coverage, health education was identified as a key tool for raising public awareness. Media outlets with broad reach, such as television and radio, were utilized to inform the public about the importance and implications of immunization. The article highlights the significance of the agreements established between the municipal government and television and radio networks to facilitate this initiative¹¹.

Social media was another tool used to publish content regarding immunization and other topics, with the aim of reaching diverse audiences. All these initiatives were essential for securing public participation in the educational activities. Health education proved to be a powerful driver for health initiatives during the COVID-19 pandemic, contributing to the strengthening of Primary Health Care (PHC). Its potential to influence behavior, such as fostering greater individual engagement with immunization, also deserves special emphasis.

Research into the public's internet search behavior during the pandemic provided a crucial resource for health professionals, enabling them to address the topics that most frequently raise questions among the population and to establish a foundation for developing health education activities; in recent years, alongside traditional teaching methods, approaches incorporating digital modalities have been developed to make learning more engaging, playful, accessible, and relevant to the contexts of target audiences¹⁰.

A concentration of searches for health education information regarding mask usage was observed in the state of Amazonas. According to the study, this finding may be associated with factors such as regional unpreparedness to tackle the pandemic, the concentration of intensive care beds in the capital, the limited reach of the healthcare network, and the low number of specialized professionals¹⁰. In this context, the authors highlight that the shortage of healthcare professionals may have contributed to the increased demand for online information regarding COVID-19. This scenario may be linked to the population's difficulty in accessing expert guidance, prompting a search for alternative sources of information about disease and prevention measures. The authors further linked the rise in internet searches to the limited availability of specialized professionals during the pandemic.

Specialized professionals often play a crucial role in health education by conducting awareness programs and educational campaigns. Without them, such initiatives might be less frequent and less effective, resulting in reduced dissemination of accurate health information.

In response to COVID-19, nurses played a vital role in implementing safety measures and promoting health. They undertook innovative initiatives that helped highlight the importance of the nursing profession and showcase the multifaceted nature of nursing practice. These innovative efforts included health education activities, such as the creation of materials encouraging the public to make fabric masks using household items, aimed at boosting community



engagement in health promotion, improving access and protection for vulnerable populations, and advancing risk mitigation efforts¹⁷.

It is believed that health education made it possible to foster active social participation in combating the pandemic, sparking interest in the making and/or use of homemade masks as an additional intervention, particularly for the benefit of needy and vulnerable populations¹⁷.

In Chile, activities were also carried out via Facebook® through live broadcasts, leveraging nursing professionals' experience in using puppets to empower individuals and families regarding self-care. A health promotion project was developed, focusing on COVID-19 prevention topics such as handwashing and vaccination²⁰.

The use of puppetry as a playful health education strategy was employed to support health promotion. This approach was deemed essential given the mobility restrictions imposed by the pandemic; live streaming technology was identified as the tool that enabled the free, real-time online broadcast of puppet shows, while also allowing for audience interaction and making the video permanently available on the hosting site²⁰.

Digital technology and social media in the health education process

The new National Primary Care Policy cites the concept proposed by Merhy and Nietzsche regarding the classification of health technologies; to ensure service effectiveness, it is essential to incorporate "light," "light-hard," and "hard" technologies, which support educational, managerial, diagnostic, and therapeutic approaches²⁵.

In this regard, the use of technologies was essential to the process of empowering nursing practices during COVID-19 within the scope of Primary Health Care, encompassing both clinical and technical practices as well as guidance and educational activities¹⁴.

Its use at the primary care level has demonstrated improvements in the relationship between nurses and service users, cost reductions, support for service self-management, and significant improvements in population health, in addition to becoming a tool for transforming work processes in primary health care¹².

Telemedicine and telehealth activities for nurses were regulated in March 2020 through Cofen Resolution No. 634/2020, enabling the promotion of health among the population vulnerable to COVID-19 complications²⁴.

The professionals highlighted that they utilized Facebook®, Twitter®, Instagram®, YouTube®, and, primarily, WhatsApp® to carry out their care and educational practices via remote service^{9,12,13}. The revival of mass communication technologies, such as radio and TV¹¹, also proved to be a strong ally for education, as it reaches a large number of people and enables the rapid dissemination of information.

Similarly, another tool mentioned was the use of mobile phones, available at the units for remote care, specifically services such as TeleCOVID, Tele-Guidance, and Tele-Consultation; five of the 10 nurses reported using these to conduct initial patient intake, provide guidance on influenza-like illnesses, and handle appointment scheduling

and referrals based on the health complaints presented during the consultation¹².

The implementation and increased use of these technologies during the pandemic facilitated the continuity of care through telemedicine, enabling patients to continue receiving consultations and guidance without needing to travel to healthcare facilities, thereby reducing the risk of exposure to the virus and overcoming geographical barriers.

Another important resource at that time was the creation of clinic profiles, which served interacting with patients by answering questions, providing useful information, and promoting public education and awareness¹³.

Although the use of technology has brought many benefits, nurses also highlighted the challenges associated with these technologies, such as a lack of administrative support and adequate infrastructure (e.g., poor internet connections) and an insufficient number of computers. Nurses report having to use their own resources (mobile phones, computers, mobile data) to carry out their work¹².

Another challenging scenario was the team's lack of knowledge regarding technical aspects; they lacked skills in using technology, struggled with online broadcasts, and lacked familiarity with managing social media¹². The rapid introduction of these instruments created a need to quickly learn and adapt to new technological platforms and tools, while making it impossible, despite the necessity, to train professionals to use these technologies effectively.

Given this, it is evident that for the use of this technology to be efficient, ongoing education regarding its handling is indispensable, as is the establishment of workflows for utilizing these newly implemented technologies to ensure the resource is used to its full potential.

Final Considerations

The results of this review highlight the significant role played by Primary Health Care (PHC) nursing professionals during the COVID-19 pandemic, particularly in care delivery, management, and health promotion through educational initiatives.

The role played by Primary Health Care (PHC) in this scenario stands out due to its close relationship with communities and its capacity to monitor the population's health. Establishing a prior connection was crucial for the community to trust the guidance provided by PHC teams, which fostered community cooperation in adhering to the recommendations.

Regarding the educational topics addressed during this period, it was possible to observe initiatives focused on women's health, child health, respiratory hygiene, social distancing, mental health, vaccine uptake, hand hygiene, and mask production.

Health education initiatives grounded in the needs that emerged during this period are highlighted, underscoring the importance of developing strategies centered on the patient and their specific requirements, while adapting health services to individual circumstances. Consequently, a primary step in the health education



process should be based on a situational assessment to understand the professional practice context, thereby enabling the design of effective interventions.

The COVID-19 pandemic impacted health education initiatives, necessitating the implementation of and adaptation to new delivery methods due to restrictions and social distancing measures. This involved the use of "light," "light-hard," and, most notably, "hard" technologies, such as virtual platforms, telemedicine, educational videos, and social media, to disseminate evidence-based information. Concurrently, nurses faced significant challenges: the need for constant professional updating to combat misinformation and ensure guidance was based on reliable data; the requirement to adapt to new technologies; and the scarcity of such technological resources. These demands arose while nurses were on the front lines of patient care, resulting in long working hours and professional burnout.

Technological resources facilitated the continuation of educational activities and user monitoring

during the period of social distancing. This also implies a need for health services to adapt by incorporating new technological resources, and for professionals to stay up-to-date and acquire new skills to keep pace with the rapid and continuous changes of the contemporary world.

It was also observed that evaluative studies are scarce regarding the effectiveness of educational initiatives carried out by nursing professionals in Primary Health Care (PHC) during the pandemic, highlighting the need for future research to measure their impact on the population's health behaviors and indicators. The end of the public health emergency does not imply the eradication of the virus; therefore, continued immunization of the entire target population remains necessary. In a scenario where vaccine refusal and the consequent failure to complete the vaccination schedule persist, educational initiatives become indispensable and highly relevant for the ongoing promotion of health.

References

1. Organização Pan-Americana da Saúde. Histórico da emergência internacional de COVID-19 [Internet]. Washington (DC): OPAS; [citado 11 jun. 2026]. Disponível em: <https://www.paho.org/pt/historico-da-emergencia-internacional-covid-19>
2. Melaragno ALP, Fonseca AS, Assoni MAS, Mandelbaum MHS, organizadoras. Educação permanente em saúde. Brasília (DF): ABEn; 2023. Disponível em: <https://doi.org/10.51234/aben.23.e25>
3. Roecker S, Marcon SS. Educação em saúde na Estratégia Saúde da Família: o significado e a práxis dos enfermeiros. Esc Anna Nery. 2011;15(4):701-709. Disponível em: <https://doi.org/10.1590/S1414-81452011000400007>
4. Tamborini MMF, Colet CF, Centenaro APFC, Souto ENS, Andres ATG, Stumm EMF. Estresse ocupacional em profissionais da atenção primária durante a pandemia da COVID-19: estudo de métodos mistos. Rev Latino-Am Enfermagem. 2023;31:e4042. Disponível em: <https://revistas.usp.br/rlae/article/view/218381>
5. Bertocchi FM. Desafios e perspectivas da atenção primária à saúde frente à COVID-19. Rev APS. 2021;24(3):431-433. Disponível em: <https://periodicos.ufjf.br/index.php/aps/article/view/35917/24071>
6. Noronha DP, Ferreira SMSP. Revisões de literatura. In: Campello BS, Condón BV, Kremer JM, organizadores. Fontes de informação para pesquisadores e profissionais. Belo Horizonte: UFMG; 2000. p. 191-198. Disponível em: https://files.cercomp.ufg.br/weby/up/19/o/Revis_o_de_Literatura_e_desenvolvimento_cient_fico.pdf
7. Dantas HLL, Costa CRB, Costa LMC, Lúcio IML, Comassetto I. Como elaborar uma revisão integrativa: sistematização do método científico. Rev Recien. 2022;12(37):334-345. Disponível em: <https://recien.com.br/index.php/Recien/article/view/575>
8. Galvão TF, Pansani TSA, Harrad D. Principais itens para relatar revisões sistemáticas e meta-análises: a recomendação PRISMA. Epidemiol Serv Saude. 2015;24(2):335-342. Disponível em: <https://doi.org/10.5123/S1679-49742015000200017>
9. Guedes HCS, Silva Júnior JNB, Januário DC, Trigueiro DRSG, Leadebal ODCP, Barrêto AJR. Information technologies as organizational support for the COVID-19 coping actions: nurses' discourse. Rev Latino-Am Enfermagem. 2023;31:e3855. Disponível em: <https://doi.org/10.1590/1518-8345.6202.3855>
10. Prado LA, Oliveira DM, Silva TF, Oliveira SV, Terças-Trettel ACP, Nascimento VF. Temáticas de atividades de educação em saúde mais acessadas pelos brasileiros durante a pandemia da COVID-19. Enferm Actual Costa Rica. 2022;(43):e50995. Disponível em: <http://dx.doi.org/10.15517/enferm.actual.cr.v0i43.48564>
11. Pereira GF, Cantão BCG, Batista Neto JBS, Silva HRS, Gouveia AO, Medeiros TSP. Estratégias para a continuidade das imunizações durante a pandemia de COVID-19 em Tucuruí, PA. Nursing (São Paulo). 2021;24(272):5162-5171. Disponível em: <https://www.revistanursing.com.br/index.php/revistanursing/article/view/111>
12. Oliveira CS, Heck RM, Pereira GM, Galarça AMSS, Mendieta MC, Lima ARA, Dias NS. Tecnologias da informação e comunicação utilizadas por enfermeiros da atenção primária na pandemia de COVID-19. Cienc Cuid Saude. 2023;22:e65820. Disponível em: https://www.researchgate.net/publication/372096257_Tecnologias_da_informacao_e_comunicacao_utilizadas_por_enfermeiros_da_atencao_primaria_na_pandemia_de_covid-19
13. Silva TC, Nitschke RG, Nascimento LC, Tafner DPOV, Viegas SMF. Tecnossocialidade no cotidiano de profissionais da saúde e interação com usuários na pandemia de COVID-19. Esc Anna Nery. 2022;26(spe):e20220123. Disponível em: <https://doi.org/10.1590/2177-9465-EAN-2022-0123pt>
14. Silva WNS, Silva KCS, Araújo AA, Barros MBSC, Monteiro EMLM, Bushatsky M, Silva WRS. As tecnologias no processo de empoderamento dos cuidados primários de enfermagem em contexto da COVID-19. Cienc Cuid Saude. 2022;21:e58837. Disponível em: https://www.researchgate.net/publication/359609070_As_tecnologias_no_processo_de_empoderamento_dos_cuidados_primarios_de_enfermagem_em_contexto_da_covid-19_Technologies_in_the_empowerment_process_of_primary_nursing_care_in_the_covid-19_context



15. Rios AFM, Lira LSSP, Reis IM, Silva GA. Atenção primária à saúde frente à COVID-19 em um centro de saúde. *Enferm Foco*. 2020;11(spe):246-251. Disponível em: <https://enfermfoco.org/article/atencao-primariaa-saude-frente-a-covid-19-em-um-centro-de-saude/>
16. Alves JG, Braga AT, Alcantara PTT, Pereira EV, Oliveira CAN. Impactos da pandemia na implementação de estratégias de prevenção do câncer do colo do útero. *Rev Enferm Atenção Saúde*. 2023;12(3):e2023109. Disponível em: <https://doi.org/10.18554/reas.v12i3.6157>
17. Abrahão-Curvo P, Mendes KDS, Lettiere-Viana A, Furtado MCC, Delatorre T, Segura-Muñoz SI. Masks for at-risk population: nursing promoting biosafety in pandemic times. *Rev Gaucha Enferm*. 2021;42(spe):e20200276. Disponível em: <https://doi.org/10.1590/1983-1447.2021.20200276>
18. Maciel ELN. A COVID-19 e a enfermagem: por um compromisso com a educação em saúde. *Rev Latino-Am Enfermagem*. 2021;29:e3473. Disponível em: <https://revistas.usp.br/rlae/article/view/189871>
19. Kaufmann LC, França AFO, Zilly A, Ferreira H, Silva RMM. Repercussões da pandemia de COVID-19 no exame preventivo de câncer de colo uterino: percepção de enfermeiros. *Esc Anna Nery*. 2023;27:e20220401. Disponível em: <https://doi.org/10.1590/2177-9465-EAN-2022-0401pt>
20. Pinilla Hormazábal P, Álvarez Mabán EM, Carrasco Dájer CM. Títeres online para promover la salud familiar en pandemia: alcance global de una innovación en enfermería. *Horiz Enferm*. 2022;33(2):176-190. Disponível em: <https://horizonteenfermeria.uc.cl/index.php/RHE/article/view/51205>
21. Guareschi APDF, Balbino FS, Andrade PR, Jesus AL, Di Gregorio AC. Consulta de enfermagem transcultural em puericultura à puérpera refugiada durante a pandemia COVID-19. *Enferm Foco*. 2022;13(spe1):e202246esp1. Disponível em: <https://doi.org/10.21675/2357-707X.2022.v13.e-202246esp1>
22. Madeira MES, Wisniewski MS, Setter NW, Wamser JL, Marcon L, Souza DM. A puericultura e os desafios decorrentes da pandemia de COVID-19. *Saúde Redes*. 2023;9(2):e4221. Disponível em: <https://revista.redeunida.org.br/index.php/rede-unida/article/view/4221>
23. Brasil. Lei nº 14.019, de 2 de julho de 2020. Altera a Lei nº 13.979, de 6 de fevereiro de 2020, para dispor sobre o uso obrigatório de máscaras de proteção individual em espaços públicos e privados acessíveis ao público, em vias públicas e em transportes públicos, e dá outras providências [Internet]. Brasília (DF): Diário Oficial da União; 2020. Disponível em: http://www.planalto.gov.br/ccivil_03/_Ato2019-2022/2020/Lei/L14019.htm
24. Conselho Regional de Enfermagem de Minas Gerais. Cuidados paliativos: manual de orientações quanto à competência técnico-científica, ética e legal dos profissionais de enfermagem [Internet]. Belo Horizonte: Coren-MG; 2020. Disponível em: <https://www.corenmg.gov.br/wp-content/uploads/2020/10/Manual-de-Cuidados-Paliativos-volume-II-site-1.pdf>
25. Brasil. Ministério da Saúde. Portaria nº 2.436, de 21 de setembro de 2017. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes para a organização da Atenção Básica no âmbito do Sistema Único de Saúde (SUS) [Internet]. Brasília (DF): Ministério da Saúde; 2017 [citado 11 jun 2026]. Disponível em: https://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/prt2436_22_09_2017.html

