

The use of social media in health promotion in time of the COVID-19 pandemic

O uso de mídias sociais na promoção a saúde em tempos de pandemia da COVID-19

El uso de las redes sociales en la promoción de la salud en tiempos de pandemia del COVID-19

RESUMO

Objetivo- verificar a efetividade das mídias sociais na promoção a saúde em tempo de isolamento social provocado pela pandemia por COVID-19. **Métodos-** revisão integrativa da literatura sobre a importância das mídias sociais para a promoção da saúde durante a pandemia do novo Coronavírus. Foram realizadas buscas no portal da BVS, nas bases de dados LILACS e MEDLINE e na PubMed. **Resultados-** foram selecionados nove artigos, sendo todos estes publicados no ano de 2020 e em inglês. Seis estudos foram indexados à base de dados Medline/Pubmed. As diversas mídias sociais encontradas nos estudos (You tube, Facebook, Twitter, WeChat, Web, dentre outras), mostraram um grande alcance e influência na promoção à saúde durante a pandemia do novo Coronavírus. **Conclusão-** conclui-se que as mídias sociais apresentam um papel importante e efetivo na promoção a saúde durante o isolamento social provocado pela pandemia por COVID-19. Isso se deve, principalmente, pelo alcance a um grande número de pessoas apresentado por elas.

DESCRIPTORIOS: Mídias Sociais; Promoção à Saúde; Covid-19.

ABSTRACT

Objective- to verify the effectiveness of social media in promoting health in the time of social isolation caused by the COVID-19 pandemic. **Methods-** integrative review of literature on the importance of social measures for health promotion during the new Coronavirus pandemic. Forms made to search the VHL portal, the LILACS and MEDLINE databases and the NCBI portal, the PubMed. **Results-** nine articles were selected, all of which were published in 2020 and in English. Six studies were indexed to the Medline/Pubmed database. The various social media found in the studies (You tube, Facebook, Twitter, WeChat, Web, among others), showed a wide reach and influence in health promotion during the pandemic of the new Coronavirus. **Conclusion-** I conclude that social media play an important and effective role in promoting health during the social isolation caused by the COVID-19 pandemic. That is mainly seen hair reaching a large number of people presented by them.

DESCRIPTORS: Social Media; Health Promotion; COVID-19.

RESUMEN

Objetivo: verificar la efectividad de las redes sociales en la promoción de la salud en un momento de aislamiento social causado por la pandemia de COVID-19. **Métodos:** revisión integrativa de la literatura sobre la importancia de las redes sociales para la promoción de la salud durante la pandemia del nuevo coronavirus. Las búsquedas se realizaron en el portal de la BVS, en las bases de datos LILACS y MEDLINE y en PubMed. **Resultados:** se seleccionaron nueve artículos, todos publicados en 2020 y en inglés. Seis estudios fueron indexados en la base de datos Medline/Pubmed. Las diversas redes sociales encontradas en los estudios (You tube, Facebook, Twitter, WeChat, Web, entre otras), mostraron un gran alcance e influencia en la promoción de la salud durante la pandemia del nuevo Coronavirus. **Conclusión-** se concluye que las redes sociales juegan un papel importante y efectivo en la promoción de la salud durante el aislamiento social provocado por la pandemia del COVID-19. Esto se debe principalmente al alcance a un gran número de personas que presentan.

DESCRIPTORIOS: Redes Sociales; Promoción de la salud; COVID-19.

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INTRODUCTION

The new Coronavirus (SARS-CoV-2) was first reported in late 2019 in China, in the city of Wuhan, after an outbreak of respiratory disease in the region. ⁽¹⁾ On January 30, 2020, the World Health Organization (WHO) declared a pandemic status caused by COVID-19. ⁽²⁾

Coronaviruses represent a family of viruses responsible for causing respiratory and intestinal infections, both in humans and animals. Among them, there are three types (SARS-CoV, MERS-CoV and SARS-CoV-2) that infect only mammals, belonging to the Betacoronavirus subfamily and presenting a high degree of pathogenicity. ⁽³⁾

According to the literature, the main signs and symptoms present in patients diagnosed with COVID-19 are: presence of fever, cough, myalgia, muscle fatigue, shortness of breath, symptoms of respiratory origin, gastrointestinal symptoms, such as diarrhea, and in more serious situations, the patient can progress

to an Acute Respiratory Syndrome. ^(4,5)

Given the complexity and negative impacts caused by the COVID-19 pandemic on the world population, the challenges faced by governments and health professionals are great. Much of society is under some form of social isolation, and because there is still no effective vaccine for the disease and an effective treatment, the biggest concern has been to control the spread of the new coronavirus, aiming to avoid overloading public health services and increasing the number of deaths, which is already a reality in some countries. ⁽⁶⁾

The media and mass media have the ability to disseminate information in society, build or break paradigms, as well as spread individual and collective precepts. Such power has been even more evident throughout the current COVID-19 pandemic. ⁽⁷⁾

Social media enter this context as tools responsible for assisting in health surveillance in various pathologies, as well as in relation to COVID-19. This has been presenting a great speed of dissemi-

nation, and therefore, producing quick answers to questions related to the new Coronavirus, can contribute to the generation of new important information for decision making, as well as for the planning and monitoring of public policies that can guarantee health promotion and disease prevention. ⁽⁶⁾

The construction of this work arose as a result of the observation of a need to promote health to the population in the midst of social isolation resulting from COVID-19. It is believed that investing in the use of social media for the propagation of important information related to the disease, as well as preventive measures of the new Coronavirus, can help improve people's health, as well as their quality of life amid this period of quarantine.

In this way, the present study becomes relevant because it allows for greater knowledge about the topic addressed, through the investigation of the available scientific evidence on the importance and effectiveness of the use of social media for health promotion in the midst

of the current pandemic experienced, in addition to contributing to arouse interest in carrying out future works on the chosen topic.

The objective was to verify the effectiveness of social media in promoting health in a time of social isolation caused by the COVID-19 pandemic.

METHOD

This is an integrative literature review. Through this, it becomes possible to carry out a methodological approach that enables the survey and synthesis of information available in the literature, as well as the application of the results found in the studies selected in the practical part⁽⁸⁾ The integrative review represents an instrument used in the field of Evidence-Based Practice (EBP)⁽⁹⁾

The following steps were followed for the construction of this work: 1) Problem definition; 2) Search and selection of primary studies; 3) Data extraction from selected articles; 4) Critical evaluation of studies; 5) Summary of results; and 6) Presentation of the review.^(10,11,12)

In the exposed work, the following guiding question was formulated: "What is the effectiveness of social media in promoting health in times of social isolation?" The question was elaborated through the PICO strategy.⁽¹³⁾

The search for the selection of articles was carried out on the Virtual Health Library (VHL) portal, with studies indexed in the International Health Sciences Literature (MEDLINE) and Latin American and Caribbean Health Sciences Literature (LILACS) databases, and in the National Center for Biotechnology Information (NCBI) portal, at PubMed.

The descriptors used were: "mídias sociais", "promoção a saúde" and "Covid-19", selected in the DECs (Descriptors in Health Sciences), and "social media", "health promotion" e "COVID-19", in Medical Subject Headings (MeSH).

As inclusion criteria, the studies had to be articles with full text availability,

published in English and Portuguese, between the years 2019 and 2020. The time period chosen is due to the fact that the new Coronavirus was only discovered at the end of the year 2019⁽¹⁾, where research and later publications on the disease began.

As exclusion criteria, review articles, communication articles, editorials, duplicate studies that did not have full text availability and studies that did not fit within the proposal of the topic addressed were disregarded.

After carrying out the Identification, Selection and Eligibility steps, nine articles were selected at the end (FIGURE 1).

RESULTS

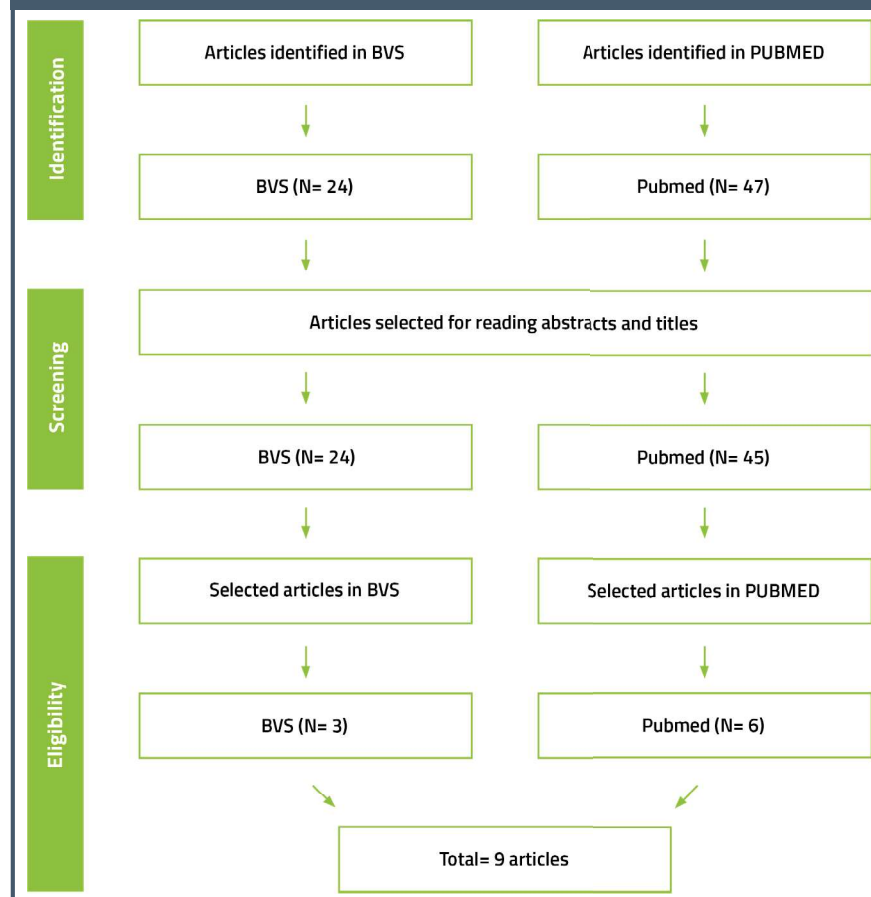
Of the nine selected articles, it was observed that they were published in their entirety in the year 2020 and in the English language. There was a predominance of studies indexed to the Medline/Pubmed database, with six articles (TABLE 1).

The information regarding the objective presented by each work, the methodology used and the conclusion of the studies are described below (TABLE 2).

DISCUSSION

The arrival of technology has brought profound changes in the way people

Figure 1. Flowchart referring to the details of searches and selection of articles on the VHL portal and PUBMED.



Source: prepared by the author, 2022.

Table 1. Categorization of selected studies. Brazil, 2020.

N°	Author/ Year	Title	Language	Database
1	AHMED et al. (2020)	A social network analysis of tweets related to masks during the COVID-19 pandemic	Inglês	Medline (PUBMED)
2	AL-DMOUR et al. (2020)	Influence of social media platforms on public health protection against the COVID-19 pandemic via the mediating effects of public health awareness and behavioral changes: integrated model	Inglês	Medline (PUBMED)
3	BASCH et al. (2020)	The role of YouTube and the entertainment industry in saving lives by educating and mobilizing the public to adopt behaviors for community mitigation of COVID-19: successive sampling design study	Inglês	Medline (BVS)
4	CHAO et al. (2020)	Media use and acute psychological outcomes during COVID-19 outbreak in China	Inglês	Medline (PUBMED)
5	CHU et al. (2020)	Use of Facebook by academic medical centers in taiwan during the COVID-19 pandemic: observational study	Inglês	Medline (PUBMED)
6	LI; LIU (2020)	Social media use, and health literacy, disease knowledge, and preventive behaviors in the COVID-19 pandemic: cross-sectional study on chinese netizens	Inglês	Medline (PUBMED)
7	MIRA et al. (2020)	Preventing and addressing the stress reactions of health care workers caring for patients with COVID-19: development of a digital platform (Be + Against COVID)	Inglês	Medline (PUBMED)
8	YOUSUF et al. (2020)	Association of a public health campaign about Coronavirus disease 2019 promoted by news media and a social influencer with self-reported personal hygiene and physical distancing in the netherlands	Inglês	Medline (BVS)
9	ZHOU et al. (2020)	Feasibility and preliminary results of effectiveness of social media-based intervention on the psychological well-being of suspected COVID-19 cases during Quarantine	Inglês	Medline (BVS)

Source: prepared by the author, 2022.

Table 2. Information regarding the objective, methodology and conclusion of the selected studies. Brazil, 2020.

N°	Objective	Methodology	Conclusion
1	Review Twitter content related to the use of masks during the COVID-19 pandemic.	Data collection was carried out on Twitter from June 27 to July 4, 2020, using the descriptor "mask". From the number of tweets collected (n= 452,430), a sample of 1% of this value (n= 4,525) was used, being chosen in a systematic random way, and then an analysis was carried out.	The authors concluded that the most common topic addressed and the popular hashtags that emerged from the data found on the social network encouraged the public to use masks as a measure to prevent COVID-19.
2	Examine the influence of social media platforms in protecting public health from the COVID-19 pandemic, through health awareness and health-related behavioral changes among the population in Jordan.	Quantitative study with an exploratory and descriptive design. A quantitative approach and various social media platforms were used to collect data through web questionnaires in Jordan. The total sample consisted of 2555 social media users. Structural equation modeling was used to analyze and verify the study variables.	The authors concluded that the use of social media platforms can positively influence awareness of public health behavior change as well as public protection against COVID-19.
3	Identify the most viewed YouTube videos as of March 20, 2020, to determine how coverage of COVID-19-related preventive behaviors has changed.	Sampling study. 100 Youtube videos were selected with the most viewed content about COVID-19 on March 20, 2020. Preventive behaviors were verified to reduce the transmission of the disease in the community.	The authors concluded that YouTube, together with the entertainment industry, presented a great reach to the public to reduce the mortality caused by the COVID-19 pandemic.
4	To investigate the mental health status and media use of a population-based sample during the early phase of the COVID-19 pandemic in China and the psychological impact of media exposure on people indirectly exposed to the disease.	A survey was conducted on January 28, 2020, based on the internet, using the Tecent Questionnaire. The study announcement and link were initially shared on a popular Chinese social media platform (WeChat Moments). Information regarding outbreak-related media use and psychological outcomes in 917 Chinese were examined.	The authors concluded that new media use and more media engagement were associated with negative psychological outcomes, while certain media content was associated with positive psychological impacts.

5	Explore the use of Facebook by academic medical centers during the COVID-19 pandemic in Taiwan.	An observational study was conducted in Taiwan of all posts on the country's Facebook fan pages from December 2019 to April 2020. All posts were categorized into "posts" related to COVID-19 or "posts not related to COVID-19". Posts related to COVID-19 were divided into 4 categories (Taiwan Center for Disease Control-TCDC policy, gratitude notes, hospitals and education news and regulations). The following data were also recorded: date of posting, title, number of "likes", number of remaining messages, number of shares, video posting or not, and survey date.	The authors concluded that social media has been a useful communication tool possible to demonstrate the value of Facebook to academic medical centers in Taiwan, along with its effectiveness of engagement in the fight against the disease.
6	To explore the predictive role of social media use in preventive behaviors in China during the COVID-19 pandemic and how disease knowledge and health education moderated the relationship between social media use and preventive behaviors.	Cross-sectional web-based survey was conducted in China in February 2020. Participants were recruited using a web-based platform from survey company Questionnaire Star. The sample consisted of 802 Chinese internet users. Descriptive statistics, Pearson correlations, and hierarchical multiple regressions were used to examine the relationship between the study variables.	The authors concluded that social media is an effective tool for promoting COVID-19 preventive behaviors among the public. Health education is essential for individual health promotion, also influencing the extent of collective attitudes and preventive behaviors during a pandemic.
7	Develop a digital tool to provide support resources that can prevent and address acute stress reactions in healthcare workers and other support staff due to the COVID-19 pandemic.	The content of the digital platform was created through consensus. The website was built using the Google Blogger tool. The Android version of the application was developed in Java and XML languages using Android Studio version 3.6, and the iOS version was developed in Swift language using Xcode version 11.5. The application was evaluated externally by the Andalusian Agency for Quality in Health.	The authors concluded that the platform was developed and launched to offer a set of recommendations and support resources that were specifically designed to protect the psychological well-being and morale at work of healthcare professionals.
8	Determining a social media campaign focused on physical distancing and personal hygiene attitudes can be considered an effective method to reduce the transmission of COVID-19.	Research carried out on March 17, 2020 in the Netherlands, focused on personal hygiene and physical distancing of the population. It was distributed by a major national newspaper and a popular Dutch social influencer. The study was completed by 16,072 participants. The following components were evaluated: hand washing, touching the face, physical distancing in the last 48 hours, in addition to demographic data.	The authors concluded that an evidence-based public health campaign strategy, delivered through national digital media and designed with behavioral insights, was associated with better personal hygiene reported by participants and increased physical distancing in the Netherlands during the COVID-19 pandemic.
9	To explore the feasibility and evaluate the potential effectiveness of WeChat-based one-to-one counseling at a university hospital in China on the psychological well-being of patients with suspected COVID-19.	Patients with suspected COVID-19 received usual psychological nursing care, and responded to the Hospital Anxiety and Depression Scale (HADS). Those who obtained a score equal to or greater than 8 on the HADS, performed individual consultation through WeChat. Consultations took place twice a day with the nurse in charge, lasting 10 minutes, over two weeks. After this period, the HADS was applied again to measure the symptoms of anxiety and depression in the patients.	The authors concluded that individual WeChat-based counseling appeared to improve the mood of patients with suspected COVID-19 during this critical period.

Source: prepared by the author, 2022.

communicate around the world, offering greater access to information and knowledge by the population. On the other hand, technological evolution together with the expansion of the internet and social media have made the human being no longer just a consumer of all content offered by these means, becoming an agent responsible for interacting and sharing such information, and thus, propagating the most diverse contents online. (14,15,16)

In emergency situations, such as outbreaks, epidemics and pandemics, technological resources, such as social media, are essential to promote communication and information about the events that

have taken place, so that effective measures are taken by Organs competent bodies and society. (1)

The use of social media can have a positive impact on the health of the population, resulting in changes in behavior and in the development of attitudes of prevention and health protection by society against the new Coronavirus. (17) This statement corroborates the findings of a study carried out in China, where they point out in their work that social media work as positive predictors for the development of preventive behaviors in society. (18)

It was observed the great reach of YouTube as a digital platform responsible for

disseminating important information related to awareness of COVID-19 prevention measures. The authors reported the presence of an increase from 125 million views in the first sample of the study to 355 million in the second sample, which shows the great influence exerted by this social media on the population. (19)

The realization of a public health campaign on preventive care in relation to the new Coronavirus, propagated by a news media platform and a digital influencer, with followers on Youtube and Instagram, was associated with an improvement in awareness and mobilization regarding personal hygiene care for disease prevention. Behaviors such as hand

washing, avoiding touching the face and maintaining physical distance were developed both by individuals who had access only to the campaign infographics and those who accessed the infographics along with the videos.⁽²⁰⁾

Following⁽²¹⁾ there was an increase in the number of posts referring to COVID-19 on Facebook in Taiwan, a decrease in posts that were related to the disease, as well as an engagement of public and private medical centers in the country in the use of this social media. For the authors, Facebook represents a tool that can be used to disseminate information regarding the risks of COVID-19, as well as awareness of health care during the pandemic.

With regard to patients with suspected COVID-19, they observed in their study that it is common for these individuals to present anxiety, fear and in some cases depressive symptoms during the period of quarantine in the hospital environment. Psychological intervention, through individual counseling through a virtual resource (WeChat), has shown positive benefits in this population, such as improving mood and reducing anxiety levels. Among the measures used during the consultations, the following can be highlighted: positive dialogue between professional and patient, emotional support, clarification about the disease, as well as information about successful cases in relation to the cure of COVID-19.⁽²²⁾

When analyzing the content posted on the social network Twitter about the use of masks during the COVID-19 pandemic, it was observed that most of the posts referred to encouraging the use of this resource as a preventive measure of the disease by the population. Ordinary citizens, politicians and public figures were among the individuals who posted the most reports about wearing a mask.⁽²³⁾

Regarding the association between media use and the psychological impact caused by this tool during the COVID-19 pandemic, it was observed that

at the beginning of the pandemic, the use of this type of tool caused negative

stress and depression.⁽²⁴⁾

However, the type of content passed on on social media is also of paramount importance, and can directly influence the psychological effects generated. In general, the information released by experts and authorities, reports of cases that have overcome the disease, knowledge about COVID-19 and prevention measures, can be useful in coping with the pandemic, reducing negative psychological effects and increasing the population's sense of control, given the situation experienced.⁽²⁴⁾

The use of social media, such as the digital platform Be + Against COVID (application and website), developed can contribute to the care of the mental health of health professionals and other areas, by addressing the emotional impact caused by the pandemic on this public, as well as the appropriate measures to face the disease.⁽²⁵⁾

CONCLUSION

Through the present work, it was concluded that social media play an important and effective role in promoting health in a time of social isolation caused by the COVID-19 pandemic. Due to the wide reach presented by the various media (Youtube, Facebook, Instagram, Chats, news, apps, etc.), a significant number of people are able to receive the most diverse information regarding the new Coronavirus, risk factors, number of cases in a given location, preventive care, mental health care, among others, significantly helping to promote health during social isolation.

As a limitation of the study, it was noticed a small number of articles found during the bibliographic survey in the chosen databases. Thus, it is necessary to carry out a greater number of works related to the topic addressed, in order to expand knowledge about the influence exerted by social media in the short, medium and long term in promoting health during the COVID-19 pandemic.

psychological effects in the population studied, such as feelings of fear, anxiety,

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