

The potential and limitations of radio as a health promotion tool: knowledge synthesis

Potencialidades e limitações do rádio como ferramenta de promoção da saúde: síntese do conhecimento
Potencialidades y limitaciones de la radio como herramienta de promoción de la salud: síntesis del conocimiento

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Abstract

Objective: Identify the potential and limitations of using radio for health promotion. **Methods:** This is an integrative review carried out from September to November 2022, using the databases Latin American and Caribbean Literature in Health Sciences (LILACS), Nursing Database (Base de dados de Enfermagem, BDEF), National Library of Medicine (PUBMED) and Web of Science with the descriptors radio, information technology and health promotion. After the inclusion and exclusion criteria, a total of 16 articles remained. **Results:** As potentialities, it was identified that radio is a relevant tool for interaction and dissemination of information, as it manages to reach different audiences, enabling greater popular engagement and, consequently, greater effectiveness of health promotion actions. Its limitations include the complexity of certain subjects and the need to adapt the language used to the target audience. **Conclusion:** The conclusion is that health professionals should be empowered to use this technology as an intermediary tool for health education actions, since it enables greater interaction and brings the user-health professional-service relationship closer together.

Descriptors: Radio; Information technology; Health promotion.

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What is already known on this?

Radio is an effective educational tool for promoting health. During the COVID-19 pandemic, it has been an important medium for disseminating information, especially to remote populations without internet access.

What this study adds?

It shows that radio in health promotion reaches remote or low-income populations, adapting to sociocultural needs, as well as complementing other health education strategies.



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Resumo

Objetivo: Identificar as potencialidades e as limitações do uso do rádio para a promoção da saúde. **Métodos:** Trata-se de uma revisão integrativa realizada de setembro a novembro de 2022, realizada nas bases de dados Literatura Latino-americana e do Caribe em Ciências da Saúde (LILACS), Base de dados de Enfermagem (BDENF), National Library Of Medicine (PUBMED) e Web of Science com os descritores rádio, tecnologia da informação/information technology e promoção da saúde/health promotion. Após os critérios de inclusão e exclusão, permaneceram 16 artigos. **Resultados:** Como potencialidades, identificou-se que o rádio consiste em uma relevante ferramenta de interação e disseminação de informações, pois consegue atingir diferentes públicos, possibilitando um maior engajamento popular e, consequentemente, uma maior efetividade das ações de promoção da saúde. E, como limitações, destacam-se a complexidade de determinados assuntos e a necessidade de adequação da linguagem a ser utilizada ao público-alvo. **Conclusão:** Conclui-se que os profissionais de saúde devem empoderar-se da utilização desta tecnologia como instrumento intermediador de ações de educação em saúde, visto que possibilita uma maior interação e aproximação da relação usuário-profissional de saúde-serviço.

Descritores: Rádio; Tecnologia da informação; Promoção da saúde.

Resumen

Objetivo: Identificar las potencialidades y limitaciones del uso de la radio para la promoción de la salud. **Métodos:** Revisión integradora llevada a cabo entre los meses septiembre a noviembre de 2022, realizada en las bases de datos Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS), Base de Datos de Enfermería (BDENF), Biblioteca Nacional de Medicina (PUBMED) y Web of Science con los descriptores *rádio (radio)*, *tecnologia da informação/information technology (tecnología de la información)* y *promoção da saúde/health promotion (promoción de la salud)*. Tras evaluar los criterios de inclusión y exclusión restaron 16 artículos. **Resultados:** Como potencialidades, se identificó que la radio es una herramienta relevante para la interacción y difusión de información, ya que puede llegar a diferentes audiencias, possibilitando una mayor participación popular y, en consecuencia, una mayor efectividad de las acciones de promoción de la salud. Como limitaciones, se destaca la complejidad de determinados temas y la necesidad de adaptar el lenguaje a utilizar al público objetivo. **Conclusión:** Se concluye que los profesionales de la salud deben empoderarse para utilizar esta tecnología como instrumento intermediario para acciones de educación en salud, ya que permite una mayor interacción y aproximación de la relación usuario-profesional de salud-servicio.

Descritores: Radio; Tecnología de la información; Promoción de la salud.

INTRODUCTION

Advertising linked to social networks and other media makes it possible to play out narratives during specific periods, such as the dissemination of information during health crises, and is seen as a favorable aspect of interactivity, since engaging citizens with knowledge enables greater participation and health promotion initiatives. Thus, Information and Communication Technologies (ICT) such as social media, radio, television or billboards, when used as a complement to health promotion, encompass a wider field of communication, characterized as an interactive and digital approach.⁽¹⁻²⁾

In view of the above, when compared to mass media, social networks show significant inefficiency when analyzed through the way they deliver their health content, not being able to disseminate their information in different formats, such as texts, images and videos.⁽³⁾

Nowadays, despite the common use of the media for health promotion, these spaces are still little explored for scientific production. However, we know the need to use these media, since they broaden the community's knowledge and autonomy through information, reaching audiences from the most varied social classes, due to their versatility and quality.⁽⁴⁾

In this way, we always try to identify the driving factors and barriers that make it difficult for people to accept new information technologies or adapt to old ones. This acceptance is seen as something related to the experiences lived, and is introduced as a final evaluation parameter, often making it difficult to adhere to, understand and validate these technologies.⁽⁵⁾

In relation to the existing means of communication for practicing health education, radio technology stands out for its popular nature, which makes it possible to spread knowledge through verbalization that is accessible to various communities, because although there have been constant advances in the communication media, radio is still present in 62% of Brazilian homes, which demonstrates its significant accessibility. In addition, it is an information vehicle that is suitable for health promotion, as it is a technology that is present in people's daily lives and makes it possible to link education and communication.⁽⁶⁾

Therefore, the choice of environment/medium of communication is an important starting point for initiating health promotion and prevention strategies, and the basic structure for the necessary configurations that can be achieved, altered and used through this process must also be chosen.⁽⁷⁾

In line with the above, public health communication, in turn, has received increasing attention through its interaction and transmission via mass media such as television, radio, newspapers, leaflets and posters, since they are able to reach a widely relevant audience.⁽⁸⁾

From this perspective, understanding the relationship between health education and the media can lead to more critical and reflective care, helping to bring the community closer to health professionals and promoting knowledge of health-disease issues.⁽⁹⁾

Thus, as a way of giving visibility to the use of community radio as an information and communication technology for health promotion, this study's guiding question is: What are the potentialities and limitations of using radio as an information and communication technology for health promotion?

Therefore, this study aimed to identify the potential and limitations of using radio for health promotion.

METHODS

This is an integrative review in which the following stages were adopted: (1) Identification of the theme or formulation of the guiding question; (2) Establishment of criteria for inclusion and exclusion of studies; (3) Definition of the information to be extracted from the selected studies; (4) Evaluation of the studies included in the integrative review; (5) Results interpretation; and (6) Knowledge synthesis.

The research question was based on the acronym PIO: Population/Problem of Interest, Intervention and Outcome. The following structure was considered: P - Potentialities and limitations; I - Radio use; O - Health promotion. The following question was thus formulated: "What are the potentialities and limitations of using radio as an information and communication technology for health promotion?"

Data collection took place from September to November 2022 in the following databases: Latin American and Caribbean Health Sciences Literature (LILACS), Nursing Database (BDENF), National Library of Medicine (PUBMED) and Web of Science, on their search sites and through the CAPES Periodicals Portal.

For the search, the following terms were selected from the Health Descriptors (DeCS) and Medical Subject Headings (MeSH): *Rádio, Comunicação em Saúde, Promoção da Saúde*, Radio, Health Communication and Health Promotion, combined with each other by the operators "AND" and "OR". This resulted in the following search strategies: *Rádio AND ("Comunicação em Saúde" OR "Promoção da Saúde")* and *Radio AND ("Health Communication" OR "Health Promotion")*.

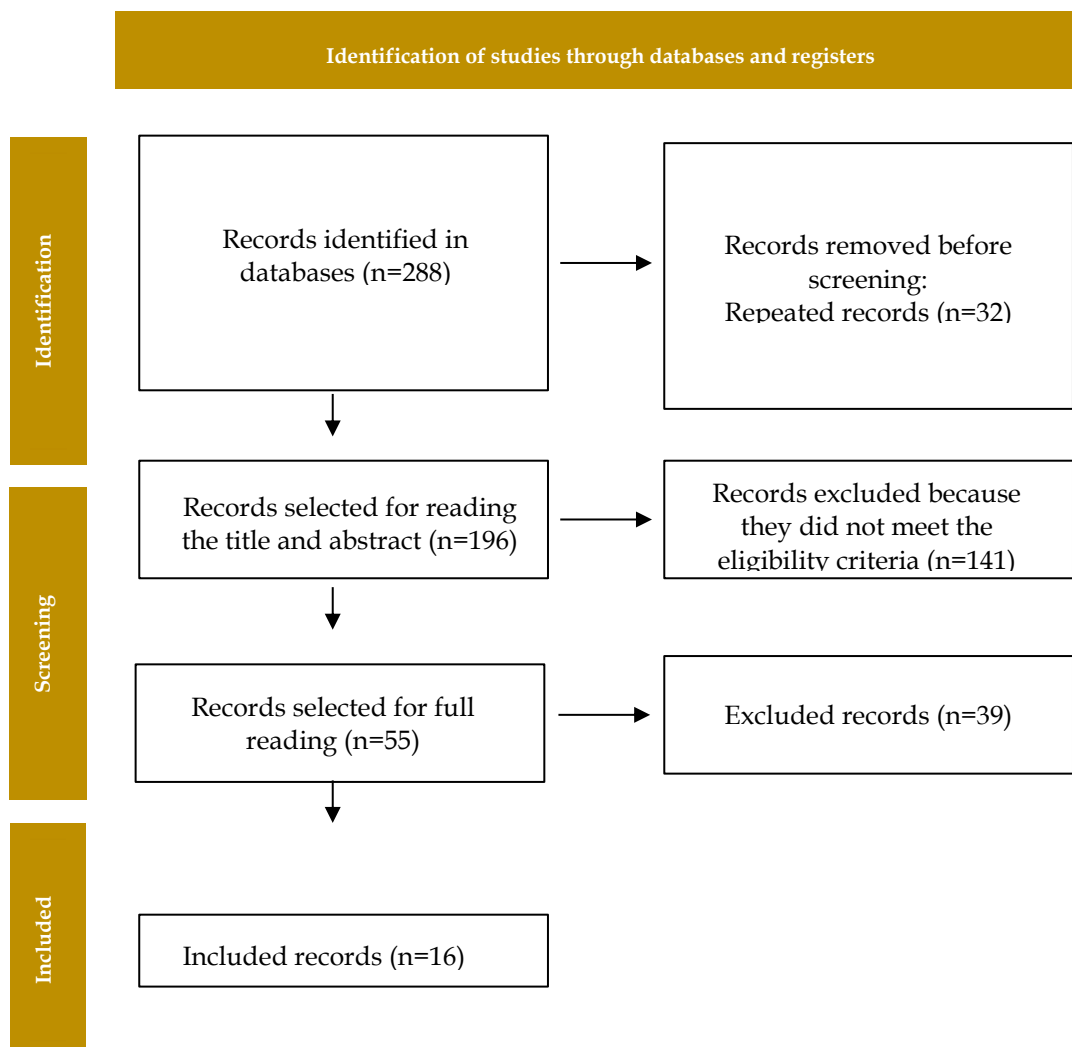
The inclusion criteria were original research addressing the radio's use in health promotion, published in the last five years (2017-2022), in Portuguese, English and Spanish, available electronically in full and free of charge. The exclusion criteria were articles that were not related to the context, that did not answer the guiding question or that were duplicated, and the first version of the text was kept.

The studies were selected according to the PRISMA method (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) by two researchers, independently, and any discrepancies were resolved by consensus. The articles found were exported in the form of an electronic RIS file and added to the Rayyan online software.

The adapted form was used to analyze and synthesize the selected articles. The form was filled in for each article in the final sample and included the following information: Database, article identification (article title, authors, country, language, and publication year), objective, method, and radio use for health promotion. The data was then analyzed in detail and critically in order to identify the potential and limitations of using radio to promote health. The results were presented in tables summarizing the information obtained.

RESULTS

Figure 1. Flowchart for selecting articles based on the eligibility criteria proposed for the review in this study. Sobral, CE, 2022.



Source: Prepared by the authors, 2022.

The search in the databases enabled 228 scientific articles to be analyzed. Next, an analysis of repeated articles was carried out, in which 32 studies were excluded, leaving only one version. This was followed by reading the titles and abstracts of the articles, excluding 141 articles that did not meet the eligibility criteria: they did not answer the research question (n=131) and review articles (n=10). Thus, 55 articles were selected for full reading. After this process, 37 references were excluded for not mentioning the potential or limitations of using radio to promote health. Therefore, 16 articles were selected for the final sample.

Table 1 shows the profile of the studies selected to make up the review sample. It was possible to identify that the studies aimed to analyze the radio use for health promotion, to investigate how this technology is used, the benefits it brings and the limitations that exist. The studies were published in 2022 (n=2), 2021 (n=6), 2020 (n=2) 2019 (n=1), 2018 (n=1) and 2017 (n=3). The data indicates a distribution of studies over the years, with six studies in 2021 standing out. The years 2020 and 2018 each had two studies, whereas 2019 had only one. The analysis suggests possible trends, stability, and fluctuations in research output, allowing insights into the evolution and potential growth areas in the area studied. The majority of articles are in English (n=11), which suggests a trend towards globalization in research, facilitating access, the sharing of best practices, international visibility and collaborations, although it may create barriers for those who are not fluent in English.

Table 1. Synthesis of the articles in the sample. Sobral, CE, Brazil, 2022.

Database	Author and publication year	Objective	Study type and sample	Potentials and limitations of the radio as a tool for health promotion
PUBMED	Nardos Gelana Adera, Bezawit Ketema, Eshetu Girma (2022)	To evaluate the effectiveness of risk communication and the quality of health communication materials developed during the 2019 cholera outbreak in Addis Ababa, Ethiopia.	A qualitative and quantitative method aimed at analyzing the effectiveness of cholera-related risk communication in Addis Ababa, Ethiopia.	Both the television and radio spots were found to be simple and easy to understand and the printed health communication materials score low quality and thus strengthen the quality of the risk communication process
SCIELO	Cardoso AJC, Silva GA (2022)	To analyze the relationship between public misinformation, political rhetoric related to tackling Covid-19 and psychological suffering, by integrating the results of two extension projects carried out in the south of Bahia.	A qualitative analysis of listener participation records from the TDC on <i>Interativa FM</i> radio and data from PPO registration forms. In the period from April 14 to June 22, 2020, 46 editions of the TDC program were broadcast with the aim of enlightening radio listeners about Covid-19.	The radio program "Questions about Covid" (<i>Tira Dúvidas sobre a Covid</i> , TDC) and the assistance service "Online Psychological Services" (<i>Plantão Psicológico On-line</i> , PPO) aimed to make the content published in scientific journals and in the mainstream media about Covid-19 understandable, with the mission of offering subsidies and influencing decision-making processes in relation to individual and collective prevention measures.
WOS	Aylinne Castro Peña et al (2022)	To reveal health promotion practices based on the advertising of educational radio programs for nurses in 1983 in Chile.	A qualitative perspective, with linguistically oriented discourse analysis, and literature review in databases: Scielo, Google Scholar, Science Direct, with keywords: health community nursing, the nurse's role, health education, nursing history.	The study shows that nurses used the radio as a fundamental tool for disseminating information relevant to the Alma Ata Project and Primary Health Care, focusing on axes such as basic health care; health promotion and rehabilitation; the scientific basis of actions and community participation in the planning of health actions.
PUBMED	Naziru Rashid et al (2021)	To assess the community's knowledge and practices in relation to COVID-19 in the municipality of Mbale.	A cross-sectional study was used: data was obtained through questionnaires for a sample of 355 respondents and an observation tool was also used to observe patterns of behavior and practices of 776	It makes communication effective through its wide reach and the consequent large number of people reached by these means of communication

			participants in relation to covid-19 control measures.	
PUBMED	Yanjie Wang et al (2021)	To evaluate the role of exposure to information on family planning through various media in the use of maternal health services.	The MDHS is a cross-sectional study designed to produce a nationally representative sample using a two-stage sampling design. The first stage selected 850 clusters, also known as standard enumeration areas (SEAs), proportional to the population. The second stage involved selecting a total of 27,531 households from the SEAs with systematic equal probability selection.	Population segregation between urban and rural areas, with the latter accounting for the largest proportion of the sample population, with the internet, for example, prevailing, given the lower penetration of modern technology and media channels in rural areas, with traditional media, including radio and TV, being the most widely used.
LILACS	Rozenfeld; Tatiana; Galindo, Wedna Cristina Marinho (2021)	To identify aspects of the women's relationship with themselves, with the health-disease process and with the Integrated Health Service (<i>Serviço Integrado de Saúde, SIS</i>), a health unit of the Unified Health System (<i>Sistema Único de Saúde, SUS</i>) that works with Integrative and Complementary Health Practices (<i>Práticas Integrativas e Complementares em Saúde, PICS</i>).	This is a descriptive study with a qualitative approach aimed at analyzing the interviews of the 'Mulheres do SIS' (SIS Women) program, broadcast by a local community radio station. These are five individual interviews recorded in audio podcast format, which make up a series - classified as a 'mini-documentary' - entitled 'Women of SIS', available on the radio station's website. According to the description, the program was intended to be another therapeutic resource that would provoke self-reflection, as well as providing visibility for the speech and experiences of these women.	In this way, the radio program was able to act directly on the intrinsic characteristics of each one, changing socio-emotional issues, mainly by favoring knowledge, acceptance, and self-reflection of these concepts.
PUBMED	Ileana Maria Ponce-Gonzalez et al (2021)	To evaluate the impact of a flu campaign led by Community Health	Twelve online workshops were held with 183 participants and 24 CHAs between	The radio media messages were shared 10 times by participants, including CHAs and users, totaling

		Agents (CHAs) on knowledge and attitudes about vaccination in Latino migrant and refugee populations.	January 12 and May 12, 2021. The participants were Latino families living in underserved communities across Washington state. The initiative also included radio, animated videos, advertisements, social media, and educational materials.	2070 shares. Radio, in turn, when used for this purpose, managed to reach an audience of more than 50,000 people throughout the campaign, demonstrating its broad reach.
PUBMED	Ann C. Klassen et al (2021)	To increase awareness of populations at higher stroke risk, including African-Americans through media-based health education campaigns.	Cross-sectional study. During 2014-2015, the Philadelphia Department of Public Health conducted a health education campaign using radio, print and transit ads to promote awareness about the link between dietary sodium, hypertension, and stroke, and encourage reduced consumption of high-sodium foods.	The results suggest that priority populations for sodium reduction can be effectively reached through radio and transit campaigns, as they offer a low-resource strategy for evaluating public health education campaigns conducted by local health departments, especially among urban populations.
PUBMED	Lei Zhang et al (2021)	This study examined differences in the demographic profile, characteristics of hotline registrants who heard the hotline from Tips national radio ads during a one-week period in 2016, and a comparison group of hotline registrants who heard the hotline from Tips national TV ads during a three-week period in 2017, when the Tips ads featured similar ad content and slogans.	Data on the number and demographics of hotline registrants in 2016 and 2017 were obtained from the National Quitline Data Warehouse of the Centers for Disease Control and Prevention. The researchers conducted tests to assess the demographic differences between registrants who heard about the hotline through radio ads and those who heard about it through TV ads during the comparison period. This analysis was carried out in 2019.	Radio and television ads served as the basis for quantifying the differences in the types of smokers who subscribed to each of the two types of media. The study's findings reveal that TV ads during the comparison weeks in 2017 tended to have lower education levels. Thus, using radio and TV media channels can be an effective strategy to combat smoking media campaigns to maximize their reach and ensure they reach different demographic groups.
PUBMED	Evaristus Adesina et al (2020)	To investigate the health communication practice on hepatitis B virus in southwestern	The study used the multistate sampling technique. Data was collected through a survey of a total of	The study concludes that health communication channels such as television, internet, radio, newspaper, and health

		Nigeria through health communication channels as predictors of knowledge, attitude, and behavioral practices.	600 randomly selected respondents from southwestern Nigeria. The result reveals that health communication channels for the management of hepatitis B virus had significant influence on the knowledge of residents of southwestern Nigeria, respectively.	workers positively influence the behavioral practices of residents of southwestern Nigeria.
PUBMED	Charity Ben-Enukora et al (2020)	To examine the effectiveness of indigenous language (Yoruba) radio jingles on knowledge, attitudes, and practices for the prevention of Lassa fever among women in Ondo state.	The study adopted a qualitative approach using Focus Group Discussion as the data collection method	Radio jingles in the Yoruba language have succeeded in promoting proper knowledge of Lassa fever among women in Ondo state. This is because the message is conveyed in musical rhythm, making it easier to memorize and repeat the educational song.
PUBMED	Garoma Wakjira Basha (2019)	To assess factors associated with the utilization of a minimum of four ANC services in Ethiopia using nationally representative data from 2016.	The study used data from the nationally representative 2016 Ethiopian Demographic and Health Survey (EDHS). A total of 7,167 mothers who gave birth in the five years prior to the 2016 EDHS, whose complete information was available in the survey, were included in the study. Statistical logistic regression analyses were used to identify factors associated with the use of a minimum of four ANC services in Ethiopia	In this study, women who read newspapers, listened to the radio, and watched TV at least once a week were more likely to use a minimum of four ANC services compared to women who did not read newspapers, listen to the radio, or watch TV. This may be due to the fact that mass media can increase women's knowledge and practice of the role of maternal health care for the health of the mother and newborns.
WOFS	Clara Muela Molina, Salvador Perelló Oliver, Alfonso de la Quintana (2019)	To analyze the endorsers' presence in DS advertising (food supplements) on a Spanish radio station and the endorsers' health-related product information.	This is a study of the systematic description of content manifested by advertising information, carried out by analyzing verbal statements as the most relevant element of the radio	The study uses radio as a basis for collecting information about the influence, consumption and rate of repercussions generated by advertising about food supplements, assessing the axes of information and the

			message and product description.	uptake of these supplements.
LILACS	Ana Paula Machado Velho et al (2018)	Describe the health communication strategies of the 19 municipalities in Paraná.	This is a cross-sectional, descriptive study with a qualitative and quantitative approach, which used a structured questionnaire to assess the satisfaction of users and professionals of the HCNs in the AMUSEP region and interviews with the managers of the municipalities in the region. Data collection took place between the Original Articles - Health Promotion in June and September 2014.	Among the suggested forms of mediated communication with the community, the managers cited strategies that use a wide variety of media, such as a loudspeaker, radio/post radio, newspaper, banner, etc. Radio, as the most cited medium alongside the sound car, is seen as a strategy that is more plausible to use, since it is directly linked to public health campaigns, guaranteeing higher adherence rates to the health service, since the population often listens to local radio programs, according to the study.
IBESC	Víctor Manuel Méndez Torres, Julia Quintana Madrigal (2017)	To compile a compendium on some theoretical considerations of the practical radio role in health promotion.	A descriptive study using the bibliographic review method, the application of analysis-synthesis, induction-deduction, and modeling to produce a consultation monograph aimed at health and radio professionals, structured around several headings: generalities of radio and its link to health promotion; radio and its role in health promotion and prevention; and, finally, the educational role of radio.	Radio, in its generalist vision, has the function of educating and sensitizing the population. Its potential is implicit when directed towards the functions of educating, informing and guiding society in a dynamic way, through health promotion and disease prevention messages.
PUBMED	Katie Greenland et al (2017)	To report the findings of the process evaluation that was conducted alongside the trial to investigate how factors associated with the delivery and receipt of the intervention influenced the uptake	This is a randomized study with interventions to improve caregiver practice of four diarrhea control behaviors: exclusive breastfeeding; handwashing with soap; and correct	The radio program and road shows, once started, helped to increase the legitimacy of the intervention in the eyes of the target population in these less receptive communities.

		of the target behaviors.	preparation and use of oral rehydration salts (ORS) and zinc. The intervention was carried out through community events (women's forums and road shows), in health centers (group sessions) and via radio.	
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Source: Prepared by the authors, 2022.

DISCUSSION

Radio is an innovative tool for educational practices, which can be used by health professionals to promote health. Health professionals can use these communication strategies, taking into account the cultural and sociodemographic aspects of the population who access information through the medium, and thus reorganize health concepts and behavioral patterns.

The study's analytical synthesis reaffirms that radio programs are developed with the aim of stimulating reflection, the construction of knowledge and the opportunity for critical thinking about health, as well as reflection on disease and health care for the population. Thus, radio can be seen as a partner in the educational process, without the intention of replacing health education actions, as it complements the process of acquiring knowledge, promoting debates on the demands of the community, and opening new ways of reaching the population.

Thus, with the current context experienced by the Covid-19 pandemic in 2019 and 2020, radio and television occupy 50% of the sources of information about this disease by the community in general, these being the main communication media that have raised awareness about the seriousness of the disease and the need for preventive measures. This highlights the importance of appropriate and well-designed health education materials for dissemination on radio, television, and social media platforms such as Facebook and Twitter, which are effective means of communication because they reach a large number of people. Thus, in the media convergence scenario, radio has been one of the vehicles most under pressure to reinvent itself, surprisingly showing greater capacity for reaction than other media.⁽¹⁰⁾

In this way, the radio's versatility proved even greater during the Covid-19 pandemic, as it was urgent to take information to the most distant places, including the population that did not have access to the internet, as a strategy to slow down the mass transmission of the disease, especially in environments limited to information resources.⁽¹⁰⁾

In this context, in Malawi, an association was made between the use of mass media and maternal health service utilization in a Demographic and Health Data survey between 2015 and 2016 to assess the role of exposure to family planning information. For the study, media such as radio, cell phone, television and poster were used for dissemination. Of these, radio, cell phone and television were the media most used to receive information about family planning.⁽¹¹⁾

In this scenario, the campaign called "Tips for Disease Control and Prevention from Former Smokers", which addresses differences in the characteristics of quitline enrollees during national radio versus television campaigns, contained information to help smokers quit and free medication delivery. A comparison was carried out in order to examine the participants' characteristics in both the radio and television campaigns. As a result of the demographic differences, those who heard about the quitline on the radio were mostly young males with more education, while those who heard about the quitline in the television ads were mostly black, foreigners, with less education.⁽¹²⁾

In Ethiopia, radio and television were also used to discuss the effectiveness and quality of the risk communication process during the cholera outbreak. As an emergency measure, health communication interventions were carried out with different partners, focusing on hygiene promotion, social mobilization and community awareness through radio and television communication. Although the communication methods were simple and easy to understand, there is a need to strengthen risk communication strategies, disease prevention strategies and the effective response of future emergency plans.⁽¹³⁾

In line with the above-mentioned study, in relation to the importance of using simple, easy-to-

understand language, one strategy used to reduce the incidence of Lassa fever outbreaks, which is one of the well-known Neglected Tropical Diseases (NTDs) that plague some states in Nigeria, transmitted by rodents, was the adoption of a musical message in the indigenous language (Yoruba) on the radio as a means of communication to promote public knowledge about home maintenance, food storage and environmental hygiene practices, which had positive results, as it made use, through the radio jingle, of lyrics that were easy to memorize and the repetitiveness of the educational song.⁽¹⁴⁾

In relation to women's health, even with adequate care during pregnancy and childbirth, most women in Ethiopia do not attend the minimum number of visits recommended by the WHO. This highlights the fact that the mass media is an important tool for disseminating information and clarifying doubts about pregnancy and normal childbirth, making pregnant women safer, more active and protagonists in the labour process. Professionals need to recognize the mass media as a new information source, in addition to being articulate and up-to-date, in order to monitor the quality of the information acquired in the media, provide guidance and indicate safe sources with quality content.⁽¹⁵⁾

Also from this perspective, by analyzing the narratives of women who took part in the program 'Mulheres do SIS' (SIS Women), broadcast on *Rádio Comunitária Aconchego*, it was possible to identify aspects related to their process of self-knowledge, the health-disease process, and their relationship with the program. The production and transmission of the podcast has clinical, aesthetic, and political relevance. In this way, the radio program was able to act directly on the intrinsic characteristics of each person, positively altering socio-emotional issues, favoring self-acceptance and self-reflection on these concepts.⁽¹⁶⁾

The mass media have also contributed to the relationship between public policies to deal with Covid-19, public misinformation, and psychological suffering. In the south of Bahia, radio programs called "Questions about Covid (*Tira dúvidas sobre Covid 19, TDC*)" and "Online Psychological Services (*Plantão Psicológico On-line, PPO*)" offered emergency assistance during the pandemic, disseminating scientific information with subsidies that influenced the decision-making process in relation to individual and collective Covid-19 prevention measures. The importance of these programs was to minimize misinformation about the pandemic, which increased the spread of the disease and consequently the increase in deaths and psychological suffering.⁽¹⁷⁾

In this sense, with some theoretical considerations on the radio's role in health promotion, it can be defined as an educational tool and its potential is implicit when it fulfills its functions of informing and guiding society in a dynamic way, with health promotion and disease prevention messages. The challenges include transforming information, which is often technical, into something that most people can understand, while respecting the regional differences of each country. In the meantime, the use of the media is a good ally in health promotion and prevention, helping in the process of health education, as it enables community empowerment and improves quality of life.⁽¹⁸⁾

As a result, when a multicomponent health education campaign was carried out, led by community health workers, to increase flu vaccination among Latino migrants and refugees, using media such as radio, animated videos, social networks and educational materials, improvements were seen in questions about the definition of influenza, symptoms and risks, the distinction between bacteria, viruses, as well as the difference between treatment and disease prevention.⁽¹⁹⁾

In this context, from a campaign that was carried out between 2014 and 2015 by the Philadelphia Department of Public Health, using radio, print and transit to promote awareness about the link between dietary sodium, hypertension and stroke, and encourage reduced consumption of high-sodium foods, it was observed that information about the consequences of excessive sodium consumption was heard on the radio by older respondents (40%) who reported being frequent radio listeners and that the campaign featured a story that was attractive to listen to, humorous and easy to understand. The facts observed suggest that the population at high risk of stroke and hypertension due to excessive salt consumption can be minimized by educational campaigns on the radio and in traffic.⁽²⁰⁾

In this way, health communication tries to reduce and eliminate the risk factors of lifestyle health behaviors. In other words, health communication is the influence of individuals and communities to improve well-being. In southeastern Nigeria, health communication channels on hepatitis B were examined and the result reveals that communication channels for the control of the hepatitis B virus had a significant influence on knowledge, attitude and preventive practices, and that communication channels such as television, radio, internet, newspapers and health professionals had a positive influence on the behavioral practices of the population.⁽²¹⁾

In relation to Primary Health Care in Chile, radio is a major driving force and fundamental tool for

health promotion. In brief, it was agreed to be an easily accessible medium capable of promoting health: its actions were carried out by nurses who, after assessing the needs, decided to use it to disseminate relevant information in innovative programs that should contribute to effective strategies for social justice, equity in health and community participation in health actions, with the aim of eliminating the disparities found in the health sector.⁽²²⁾

From this perspective, radio is also considered a traditional method capable of generating and promoting information on a wide variety of topics. Some campaigns were carried out through a Cantonese radio program, *Rainbow Beneath the Sky*, broadcast on KMRB AM1430 in Greater Los Angeles. During the programs, in addition to the programmed dialogues, playful strategies were promoted with the aim of preventing and reducing the aggravations of dementia, as well as promoting interaction and maintaining the participation of the target audience. As a way of introducing the public to the experience, participants sent emails to the organization with suggestions for topics to raise awareness about dementia in the Chinese-American community.⁽²³⁾

Radio therefore provides an approach that allows the target audience to be entertained. In Zambia, Africa, the programs are conducted by DJs who are trained to discuss the public's behavior and promote campaigns through their announcements, addressing the issues of how mothers should care for children and newborns in order to prevent diarrhea. These programs were shown in intervention and control areas, where they were intended to act on mothers' care behavior, the barriers they see and the associated taboos.⁽²⁴⁾

In addition, in Paraná's municipalities, located in the Brazilian southern region, the media, such as radio and TV, are considered viable strategies for encouraging anti-smoking, ensuring a greater public reach and different demographic groups, given that they have managed to reach audiences with lower levels of education, when compared to more advanced technology levels.⁽²⁵⁾

CONCLUSION

The media are important tools for interaction and dissemination of information, as they can reach different audiences, enabling greater popular engagement and, consequently, greater effectiveness of health promotion actions.

Radio is an important example of this, given its easy accessibility and the fact that it brings the population closer together culturally and socio-demographically. It is therefore an important ally in educational processes, but there is a need to adopt communication strategies that facilitate understanding of the information to be passed on to the listening public in its various contexts.

As such, it is a medium considered to have a significant reach for people with low education levels, as well as being the most used by the older adults, which allows for greater information dissemination to this audience.

In relation to the study's limitations, it can be highlighted the complexity of certain subjects and the need to adapt the language to be used for the target audience, considering the various factors that can influence the communication's effectiveness, such as age group, education level and socio-economic and socio-demographic issues. In addition, there is also a need for greater adherence by professionals to the use of these means of communication in the health education process.

In this way, it is also important for health professionals to empower themselves to use this technology as an intermediary tool for health education actions, since it enables greater interaction and closeness between professionals and users and, consequently, between users and health services.

CONTRIBUTIONS

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