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SCIENCE COMMUNICATION IN BIOLOGY: a literature review focusing on podcasts

DIVULGAÇÃO CIENTÍFICA EM BIOLOGIA: uma revisão da literatura com foco nos podcasts
DIVULGACIÓN CIENTÍFICA EN BIOLOGÍA: una revisión de la literatura centrada en los podcasts

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ABSTRACT:
Scientific dissemination is currently essential and can be carried out through various means of communication, such as podcasts. Podcast is a program in audio or video format distributed on aggregators through a feed. The content is recorded on various platforms and/or websites for free so that listeners can learn about that program directly or through download on computers and smartphones. By inserting scientific topics into podcasts, we enable an accessible approach in terms of language and access to episodes. This work carried out a review of the literature on Scientific Dissemination in Biology with a focus on podcasts. The methodology used keywords corresponding to the research question in the following search platforms: Periódicos Capes, Scielo and Web of Science, in addition to specific criteria for inclusion and exclusion of articles for analysis. Seven articles were selected and evaluated for their relevance to the subject of the work. Although there are few works that relate Scientific Dissemination about Biology in podcasts. We conclude that this media demonstrates potential for varied applications as a pedagogical tool in both basic and higher education; dissemination of mass information and combating fake news; and bringing academia and the lay public closer to science jargon.

KEYWORDS: Biology; Scientific divulgation; Podcast; Literature review.

Introduction

Scientific dissemination can occur in different ways, such as through television programs, documentaries, educational videos, lectures, interactive exhibitions, podcasts, scientific blogs, open access scientific journals, among others. These tools are used to transmit information about scientific discoveries, technological advances, and innovative research that can help the entire community. These forms of communication have been increasingly used in non-formal educational spaces and in various media (Marandino et

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al., 2003), reaching a large audience when compared to open TV programs or smaller groups, such as lectures for the lay public (Bueno, 2010).

With the aim of bringing society closer to science in a simple and accessible way, scientific dissemination presents facts and scientific progress, using popular and everyday language, and can reach a heterogeneous audience, not necessarily linked to the scientific area. However, its due relevance was never given, since the general public does not have access to scientific productions and is therefore unaware of the basis of scientific development (Dantas & Maia, 2020).

The role of scientific communication has evolved over time, following the development of science and technology. It can be oriented towards different objectives, such as: educational, civic and popular mobilization. Depending on the emphasis on each of these aspects and objectives, the target audience for these activities also varies, be it students, literate and illiterate populations, agents formulating public policies and even scientists and technologists themselves (Albagli, 1996).

In this context, actions that seek to bring science closer to the community can have an influence on people's perception and construction of knowledge in relation to nature conservation, environmental impacts and new health problems that may arise, such as COVID-19 (Dantas & Maia, 2020). According to the S&T Public Perception survey in Brazil (2019), 73% of the population believes that science and technology bring more prerogatives to society than disadvantages, with this same index being recorded four years ago (Caires, 2020). This aspect was clearly addressed by Almeida (1931) when he said that contact with science creates states of mind that are more receptive and capable of understanding it. According to Tostes (2006), "an educated, informed, aware and aware public of its resources in science and technology is capable of playing an active role in converting experimental processes into routine resources and prototypes into commercial models".

Currently, scientific dissemination has become even more necessary. Given the prevalence of fake news, creating and disseminating Science has become indispensable. There are several ways for society to have access to scientific content in a palatable way, through different media. One of the most recent, we call a podcast, which consists of a program in audio or video format distributed in aggregators through an RSS (Really Simple Syndication) feed, a means of distributing content in real time. In the case of podcasts, the content is in audio format. The content is recorded on various platforms and/or websites for free so that listeners can learn about that program directly or through download on computers and/or smartphones (Lopes, 2015).

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According to Thomas and Shaw (2019), when we insert scientific guidelines into podcasts, we enable an approach that is accessible in terms of language and access to episodes. Gums and collaborators (2019, p. 2) point out some benefits of this media such as "the dissemination of research, the expansion of professional contacts between researchers and researchers, and the exercise of interpersonal communication".

According to PodPesquisa 2019 (ABPOD, 2020), the third biggest interest in searching for podcasts in Brazil is precisely Science. Therefore, in this work we carried out a literature review of existing data on the topic with the aim of answering the question focused on the status of scientific knowledge encompassing podcasting and Biology.

History and conceptualization of Scientific

Dissemination According to Burkett (1990), scientific writing, as well as scientific dissemination, began in the 16th century, in which European researchers met secretly from the church and the State, fearing possible repression. These meetings, which would later take place more freely, were also attended by traders and artists.

The first discussions about science began in Italy in 1560, however they suffered much repression and were prevented from continuing their activities in 1580 (Muller & Caribé, 2010). Still, despite the obstacles, discussions about science prevailed in subsequent years through letters that were sent with others with common content, that is, not prohibited, in order to hide them.

In the 17th century, the first scientific and popular science periodicals were published. Also in the 17th and 18th centuries, books had their importance and began the process as instruments of scientific dissemination. Still in the 18th century, the first scientific conferences took place, which were held in the format of short or extensive courses and classes, which could last for months. It was only in the 19th century that the first publications in books occurred. Still in that same century, periodicals and the renowned Nature and Science magazines were created. As well as children's books, scientific journalism, museums and science centers and information technology with the press, radio, television.

In Brazil, scientific dissemination (SC) emerged after the Second World War, by a scientist-communicator, called José Reis, in the period between (1948-1958). Its dissemination was carried out for 60 years through printed newspapers (Abdala-Mendes, 2006).

From the 20th century onwards, considered the era of technology, with the internet, websites, virtual spaces where there are Science museums, books, magazines,

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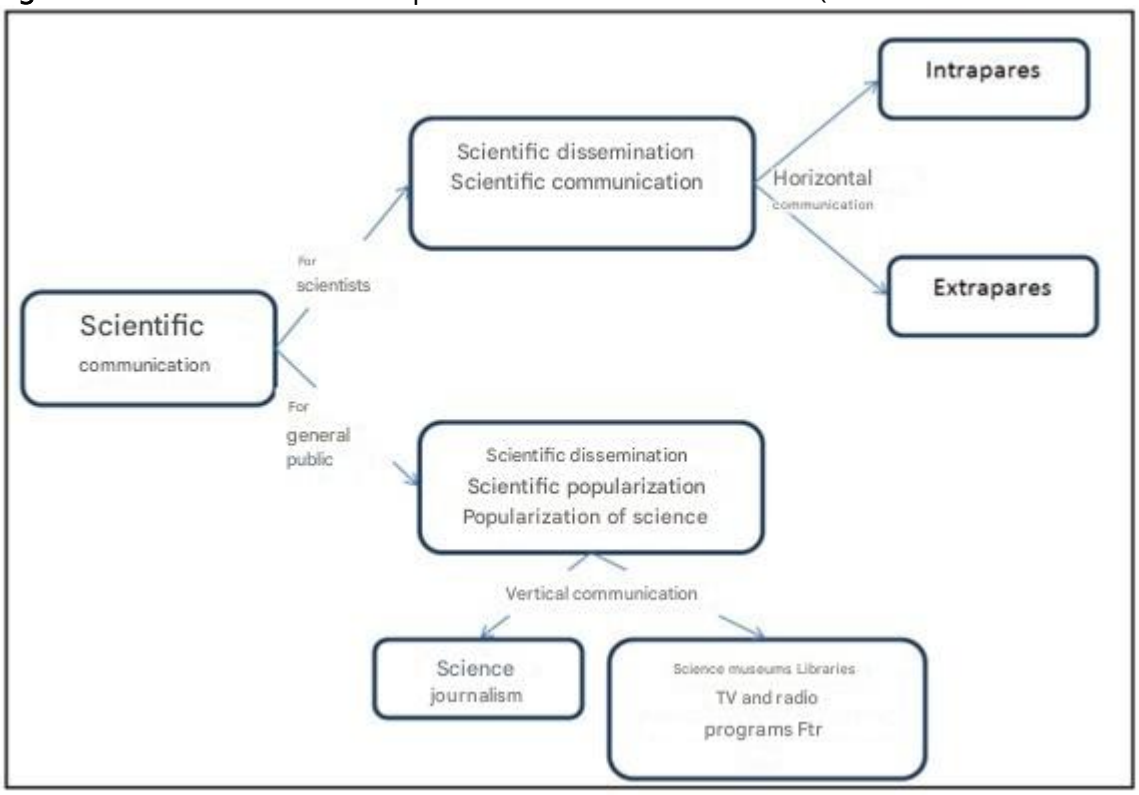
films and the most recent, podcasts, scientific dissemination became more widespread (Muller & Caribé, 2010).

Disclosure comes from the word vulgarization which in Latin, vulg means plebs, people, that is, Science for the general public. According to the literature, the concept of CD has been structured for years, presenting several synonyms such as popularization, vulgarization and public communication in Science (Reis, 1964; Nascimento, 2008; Cunha, 2009). According to Houaliss (2010), this term was only used from the 19th century onwards, however, terms such as scientific communication and scientific diffusion that were already used in previous centuries aimed to inform a select public about scientific issues. According to Shannon and Weaver (1949), the term Scientific Communication was used, defining it as sender, message and receiver.

The sender is the researcher passing on his message and the receiver is the general public. Caribé (2011), as a way of better explaining these terms, listed above, developed a scheme (Figure 1), showing the difference and connections between such concepts.

Figure 1 – Connections of concepts on Scientific Dissemination (SC



Source: Adapted from Caribé (2011).

The popularization of science, or scientific dissemination, is a reformulation of scientific discourse that can also be understood as the use of technical processes and resources for the communication of scientific and technological information (Bueno,

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1985), or as communication between science and society (Gonzales, 1992). This form of communication has been increasingly used in educational spaces through various media (Marandino et al., 2003).

History and conceptualization of Scientific

Dissemination Nowadays, DC occurs through various media formats: films, documentaries, scientific dissemination magazines, articles in periodicals, websites, blogs, museums, fairs, traveling tents (Ciência sob tents), Express da Ciência (Fiocruz) and more recently, podcasts.

The podcast is a new medium that emerged in 2004, from the distribution of audio and video files via RSS feed (Really Simple Syndication), technology programmed by Ben Hammersley & Dave Winer (Nuzum, 2021), and which characterized blogs, how they would come to be consolidated, and distributed.

Still in 2004, the first Brazilian podcast was produced, called "Digital Minds". The name podcast was given by the former VJ of Music Television (MTV), a television channel of North American origin, Adam Curry, who suggested to Dave Winer a code change that would make it possible to transfer audio to the iTunes aggregator. This method was called podcasting by Ben Hammersley, combining the prefix "pod", from iPod, with the suffix "casting", from "broadcasting", massive transmission of information (Lopes, 2015).

The advantages of podcasts are diverse, starting with the way they are made available, through smartphones, tablets and computers. To access it, you only need an internet connection with low data usage. Once these episodes are downloaded, they can be consumed offline. Furthermore, its production uses simple resources, as all that is needed is a simple microphone to perform the voice-over and recording, as well as an audio editing program (Bueno & Fonseca, 2021).

However, producing a podcast is not that simple. It is necessary to prepare the content, the agenda and therefore its script, and review this text. The next stage is the voiceover. In the third stage, which involves editing this audio, a specific program is needed to treat noise and language defects. And finally, this podcast will be made available on a website (whether paid or not), or on podcast aggregators such as: Spotify, Deezer, Apple Podcasts, Google Podcasts.

The Brazilian science podcast scene grows and becomes more concrete every day. PodPesquisa 2019 shows that 52.3% of the participating public showed interest in the science podcast category, which represents an increase of 9.1% compared to PodPesquisa 2018 (ABPOD, 2018). Among the projects that paved this path are Scicast

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and the entire Deviante Portal, the podcasts Dragões de Garagem, Naruhodo, and the science episodes on Nerdcast.

Methodology

The guiding question of the review was: "What is the status of scientific knowledge in the field of Scientific Dissemination encompassing podcasts and Biology?". In order to obtain answers to this question, literature searches were carried out in the following databases: Periódicos Capes, Scielo and Web of Science. Descriptors in Portuguese and English were used and combined with each other with the help of the Boolean operator AND (E) (Pizzani et al., 2012), in addition to the asterisk (*) after the word "podcast" (podcast*), in order to include derived terms such as "podcasting" and "podcaster" in the search.

For the search on the Web of Science platform, only keywords in English were used. Articles published between 2004 and 2022 were included in the review, as 2004 was the year the podcast was created. The selected articles used applications of Scientific Dissemination in Biology through podcast media.

Inclusion and exclusion criteria for articles searched: only works that intersect the themes of podcasts, scientific dissemination and Biology were considered; works that only involve the topic of podcasts or scientific dissemination or only biology were not considered; only articles in English and Portuguese were included; works that presented the term "podcast", however, without this having greater relevance in the results, were excluded; book chapters, editorial letters and event advertisements were excluded.

Results

Regarding scientific knowledge properly indexed in databases, there is very little information about scientific dissemination podcasts in Biology until the production of this work, despite there being several initiatives in this regard across the country and around the world. In a quick search for the terms "biology" or "biology", on the podcast aggregators Podcast Addict (Guillemane, 2023) and Spotify (Spotify AB, 2023), it is possible to find dozens of different programs focused on biology, specifically.

According to table 1, it is possible to verify that the term "scientific dissemination" has several synonyms, such as: "scientific communication", "scientific popularization", "scientific dissemination" and "vulgarization of science". When translated into the English language, the options are also diverse: "science communication", "science popularization", "science dissemination" and "science vulgarization". With the help of the

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Boolean operator "AND", in English, or "E", in Portuguese, we were able to associate each of the terms above to the terms "podcast*" and "biologia" or "biology".

There was an attempt to carry out the search using the Boolean operator OR (OR) as exemplified below: "scientific dissemination" OR "scientific communication" OR "scientific popularization" OR "scientific dissemination" OR "scientific popularization" AND "podcast*" AND "biology". However, searches regarding this search equation returned no results. When searching for each term separately ("scientific dissemination" AND "podcast*" AND "biology"), we obtained results.

The search for terms in Portuguese had no results on the Web of Science platform. We only obtained results in the English language. In the Scielo and Periódicos Capes databases, we obtained results in both languages (Table 1).

Table 1 – According to the keywords searched. Source: file prepared by the authors

	DATABASES		
Keywords	PERIÓDICOS CAPES	SCIELO	WEB OF SCIENCE
"Divulgação científica"	X	X	
"Divulgação científica" AND Biologia	X	X	
"Divulgação científica" AND *Podcast**	X	X	
"Divulgação científica" AND Biologia AND *Podcast**	X	X	
"Comunicação científica"	X	X	
"Comunicação científica" AND Biologia	X	X	
"Comunicação científica" AND *Podcast**	X	X	
"Comunicação científica" AND Biologia AND *Podcast**	X	X	
"*Science communication*"	X	X	X
"*Science communication*" AND *Biology*	X	X	X
"*Science communication*" AND *Podcast**	X	X	X
"*Science communication*" AND *Biology* AND *Podcast**	X	X	X
"Popularização científica"	X	X	
"Popularização científica" AND Biologia	X	X	
"Popularização científica" AND *Podcast**	X	X	
"Popularização científica" AND Biologia AND *Podcast**	X	X	
"*Science popularization*"	X	X	X
"*Science popularization*" AND *Biology*	X	X	X

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"*Science popularization*" AND *Podcast**	X	X	X
"*Science popularization*" AND *Biology* AND *Podcast**	X	X	X
"Disseminação científica"	X	X	
"Disseminação científica" AND Biologia	X	X	
"Disseminação científica" AND *Podcast**	X	X	
"Disseminação científica" AND Biologia AND *Podcast**	X	X	
"*Science dissemination*"	X	X	X
"*Science dissemination*" AND *Biology*	X	X	X
"Science dissemination" AND *Podcast**	X	X	X
"*Science dissemination*" AND *Biology* AND *Podcast**	X	X	X
"Vulgarização da ciência"	X	X	
"Vulgarização da ciência" AND Biologia	X	X	
"Vulgarização da ciência" AND *Podcast**	X	X	
"Vulgarização da ciência" AND Biologia AND *Podcast**	X	X	
"*Science vulgarization*"	X	X	X
"*Science vulgarization*" AND *Biology*	X	X	X
"*Science vulgarization*" AND *Podcast**	X	X	X
"*Science vulgarization*" AND *Biology* AND *Podcast**	X	X	X

Source: File prepared by the authors.

The search on the platforms resulted in 51 articles, four (4) of which were found repeated in both Web of Science and Periódicos Capes and one (1) was found repeated in both Scielo and Periódicos Capes. That is, 46 different articles in total (Figure 2).

These 46 articles highlighted by the search on the platforms were then subjected to the inclusion and exclusion criteria previously mentioned. Seven (7) articles were selected to be the study objects of this work (Table 2).

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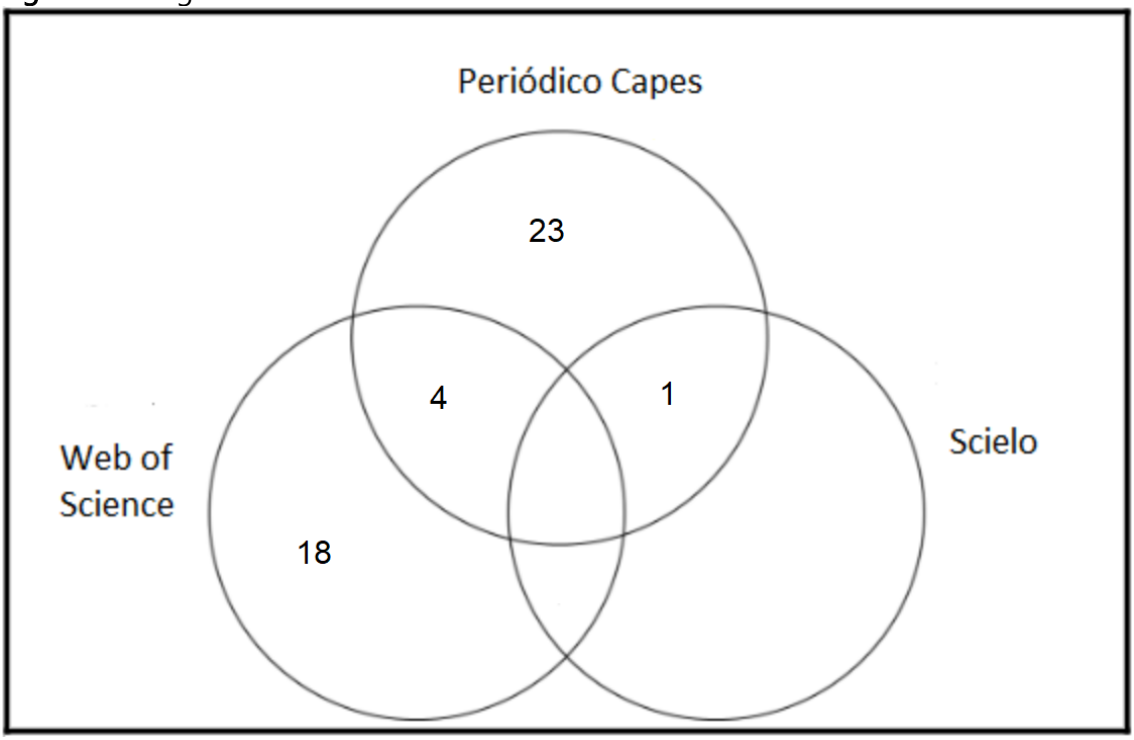
Figure 2 - Diagram of the number of articles found in the Databases



Source: Prepared by the authors.

Table 2 - Articles selected for evaluation in this review

N°	TITLE	AUTHORS HIP	ACESS
1	Does the medium matter? Comparing the effectiveness of videos, *podcasts* and online articles in nutrition communication	Weiß & König, 2022	https://iaap-journals.onlinelibrary.wiley.com/doi/epdf/10.1111/aphw.12404
2	Guidance in the chaos: effects of science communication by virologists during the covid-19 crisis in germany and the role of parasocial phenomena	Utz, Gaiser & Wolfers, 2022	https://journals.sagepub.com/doi/10.1177/0963662522109319 4
3	Narrativas docentes em *podcasts*: alternativas de inserção de tecnologias digitais em contextos educativos amazônidas	Mota *et al.*, 2020	https://sistemascmc.ifam.edu.br/educitec/index.php/educitec/article/view/1601
4	Papers to *Podcasts*: Curriculum for Developing Scientific Practices in Undergraduates through Annotating Primary Scientific Literature & Creating *Podcasts*	Palavalli-Nettimi *et al.*, 2022	https://bioone.org/journals/the-american-biology-teacher/volume-84/issue-7/abt.2022.84.7.428/Papers-to-Podcasts--Curriculum-for-Developing-Scientific-Practices-in/10.1525/abt.2022.84.7.428.short

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5	*Podcasts* e webinars sobre Covid-19 na área de Ciência da Informação	Silva & Andrea, 2020	https://revistas.ufpr.br/atoz/article/view/75860/42110
6	Using a social media project as a way to get students to communicate conservation messages to the general public	Shrader & Louw, 2021	https://www.tandfonline.com/doi/abs/10.1080/00219266.2021.1924231
7	Will *podcasting* and social media replace journals and traditional Science Communication? No, but…	Fox *et al.*, 2021	https://academic.oup.com/aje/article/190/8/1625/6292357

Articles 5 and 6 (according to table 2) highlight the importance of digital media such as podcasts and videos, which can be easily shared over the internet, thus being more accessible to more audiences than other more traditional media such as newspapers and scientific articles. This reach was particularly relevant during the COVID-19 pandemic, to inform the population about care related to the disease (articles 2 and 5). In addition, the podcast tool is as effective as videos and texts for disseminating information of public interest, as exemplified in article 1.

The use of the podcast was also mentioned as a pedagogical resource as an implement in the curriculum of undergraduate students, in the training of new professionals (article 4) and in the complementary training of teachers in formal education networks (article 3).

There are also indications to be careful with the scientist or professor who starts producing content on the internet, in digital media, such as podcasts. Highlighting the possible exposure to negative comments and the demand to always post or consume more content (article 7).

Discussion/Data analysis

The scenario of Brazilian science communication (SC) has changed in the last ten years, notably showing a change from the predominance of blogs to other and varied media such as podcasts, YouTube channels, digital magazines and e-books (Salles et al., 2020). Podcasts stand out for the possibility of producing content in simple language and in an economical way to expand supply and audience, adapting to the new consumption of the digital environment (Inomata et al., 2021).

Compared to the traditional method of publishing scientific articles through which scientists communicate their findings and hypotheses, social media has a much greater reach in relation to the public, mainly laypeople (Fox et al., 2021 - article 7 in table 2). It is no different with podcasts, plus the very plastic characteristic of this media in terms of its consumption, as exemplified by a survey carried out in the United States (YouGov,

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2023), which indicated that podcasts are consumed while people carry out other activities, such as household chores (49%), commuting between home and work (42%), while cooking (29%) or practicing physical activities or sports (29%).

In 2020, there was a 76% increase in the number of DC episodes produced compared to the previous year. This increase was probably due to the race for information and the contact restrictions imposed by Covid-19, which caused people to seek and consume more information, in digital media, about the disease and its effects on human populations (Dantas & Deccache-Maia, 2022).

The podcast suited itself as an informative vehicle that was different from traditional scientific communication, but took advantage of this to bring Science information to different audiences (Silva & Andrea, 2020 - article 5 of table 2). In addition to not falling behind in relation to other digital media, showing the same effectiveness in transmitting messages of a scientific nature and public interest (Weiß & König, 2022 - article 1 of table 2).

In this communication, the importance of podcast content in combating fake news must be highlighted, false news often propagated on purpose and replicated by people who have credibility with part of the population, which increases its negative effects (Dantas & Deccache-Maia, 2020). In the Brazilian reality, as an example, we had to deal with the denialism of several authorities, spreading the unfounded belief that chloroquine, and other medicines that made up the so-called Covid Kit, would serve as effective medicines against COVID-19. This was despite several studies already pointing to the ineffectiveness and dangers of using the components of this kit for this purpose (Beigel et al., 2020; Cavalcanti et al., 2020; Horby et al., 2020; Mitjà et al., 2020; Siemieniuk et al., 2020).

In contrast to fake news, several media outlets were used to refute this major problem, which had a high growth rate during the COVID-19 pandemic. The main resource used was the internet through massive information transmission platforms, such as social networks, videos, WhatsApp and podcasts. According to Francesco and Leone (2020), social media has a high potential to disseminate and engage content, which has created space for a large spread of fake news, which undermines society's trust in news sources.

However, disseminated information alone is not effective in combating the exacerbated evil of fake news. It is necessary to create trust, proximity with users, consumers, readers and thus, gain a certain audience on these large channels within the world of the web. A study carried out in Germany (UTZ et al., 2022 - article 2 of table 2), focusing on podcast media, showed that, among the virologists producing content

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during the COVID-19 pandemic, one of them stood out as the public's preference over the others. This fact demonstrates how the relationships that arise between people who consume content occur in relation to those who produce it and presents the importance of the podcast as a potential tool for parasocial phenomena, interactions that listeners have in relation to the podcast or in relation to the content producer (UTZ et al., 2022). According to Teffé and Moraes (2017), the internet is very important for the dissemination, storage and processing of information at great speed and precision, however, it may not be enough to produce quality material if there is no deeper connection with the public.

Highlighting the importance not only of scientifically based information, but how and by whom this information is being communicated, we arrive at a very important point, because according to Shrader and Louw (2021) (article 6 of table 2), communication skills with the public must be reinforced since the training of new professionals in the areas of science, technology, engineering and mathematics (STEM).

According to Fox and collaborators (2021) (article 7 of table 2), there are several reasons for a scientist to produce content for digital media. From the most altruistic, such as providing a public utility service of taking formal information from academia to society, to self-promotion, as a researcher, in your field of activity and the satisfaction of communicating about your work subject in a lighter and informal way.

Palavalli-Nettimi et al, (2022) also highlight the opportunity to use podcasts as a tool in the training of professional biologists, specifically. The authors highlight that the skills developed in the preparation of a podcast episode: such as researching the base material; script synthesis and development; the decision and formatting of the structure, such as narration or chat; They can help enormously in training professionals as science communicators and consumers of primary scientific literature.

Mota et al., (2020) (article 3 of table 2) also point out that podcasts as a medium are more accessible because they are audio files in .mp3 format, which cause little internet data usage and are accessible from any smartphone. This factor makes this digital tool a good pedagogical resource, especially in areas that receive less financial and technological support. Favoring better compliance with competencies 4 and 5 of the National Common Curricular Base (BNCC) (Brasil, 2017), which provide that the school enables students to take ownership of digital technologies, with the aim of understanding, using and creating new technologies.

A survey carried out with 81 teachers from seven states in Brazil indicated that videos and images are the digital resources most used by teachers (Alvarenga, 2018). This is a current trend, as technologies are increasingly incorporated into various human

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activities. This means that the use of these tools should be encouraged, as many students are still unaware of how their mobile devices and digital media can be useful for learning, in addition to many guardians still seeing them as distractions from formal teaching (Bottentuit Junior, 2020).

With digital technologies, there is a tendency to streamline classes, which makes learning more diverse in terms of the contexts in which it occurs (Moura, 2016). The incorporation of tools such as podcasts tends to enhance the development of students as agents in their own learning process, that is, making them more autonomous and achieving a feeling of belonging in relation to the knowledge developed.

Final considerations

Digital media such as podcasts have proven to be an accessible tool both for producers, due to their low operating costs, and for consumers, and can be accessed via smartphone without spending much on internet data and while carrying out other simpler tasks. The flow of information can be more consolidated if the relationship between consumers and content producers is closer, that is, if the audience becomes more frequent.

Podcasts show the same effectiveness in transmitting information as other digital media. In 2020, in light of the COVID-19 pandemic, there was a boom in the production of this type of content, which ended up proving to be a good tool to combat fake news about the disease and the SARS-CoV-2 virus that was spreading very strongly.

In addition, the positive and negative aspects that come from exposure on the internet for the person who produces content were also evaluated. One of the positive aspects is the way in which podcasting can help develop skills both related to academia, such as interpreting texts from scientific literature, and in the communication aspect, in the process of adapting academic language to be taken to other types of audiences.

According to the articles selected and read, scientific communication encompassing Biology and podcasts is still very little represented academically. Although there is a wide variety of podcasts focused on this subject and available on aggregators, this tells us that there is a gap in the production of studies on scientific dissemination carried out by these initiatives.

This work sought to draw attention to filling this gap by summarizing what has been documented so far about science communication podcasts in Biology.

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RESUMO:
A divulgação científica, atualmente, se faz indispensável e pode ser realizada através de diversos meios de comunicação, como os *podcasts*. *Podcast* é um programa em formato de áudio ou vídeo distribuído em agregadores através de *feed*. Os conteúdos ficam gravados em diversas plataformas e/ou em *websites* de forma gratuita para que os ouvintes tenham conhecimento daquele programa diretamente ou através de *download* em computadores e *smartphones*. Ao inserirmos pautas científicas em podcasts, possibilitamos uma abordagem acessível na linguagem e nos acessos aos episódios. Este trabalho realizou uma revisão da literatura sobre Divulgação Científica em Biologia com foco nos podcasts. A metodologia utilizou-se das palavras-chave correspondentes à pergunta da pesquisa nas seguintes plataformas de busca: Periódicos Capes, Scielo e *Web of Science*, além de critérios específicos de inclusão e exclusão dos artigos para análise. Sete artigos foram selecionados e avaliados quanto à sua relevância ao assunto do trabalho. Apesar de serem poucos os trabalhos que relacionam a Divulgação Científica sobre Biologia em podcasts. Concluímos que essa mídia demonstra potencial para variadas aplicações como ferramenta pedagógica tanto no ensino básico quanto no superior; disseminação de informação em massa e combate a *fake news*; e aproximação da academia com o público leigo aos jargões da Ciência.

PALAVRAS-CHAVE: Biologia; Divulgação científica; Podcast; Revisão de literatura.

RESUMEN:
La divulgación científica es actualmente fundamental y se puede realizar a través de diversos medios de comunicación, como los podcasts. Un podcast es un programa en formato de audio o vídeo distribuido en agregadores a través de un feed. El contenido se graba en diversas plataformas y/o sitios web de forma gratuita para que los oyentes puedan conocer ese programa directamente o mediante descarga en computadoras y teléfonos inteligentes. Al insertar temas científicos en los podcasts, permitimos un enfoque accesible en términos de lenguaje y acceso a los episodios. Este trabajo realizó una revisión de la literatura sobre Divulgación Científica en Biología con enfoque en podcasts. La metodología utilizó palabras clave correspondientes a la pregunta de investigación en las siguientes plataformas de búsqueda: Periódicos Capes, Scielo y Web of Science, además de criterios específicos de inclusión y exclusión de artículos para análisis. Se seleccionaron y evaluaron siete artículos por su relevancia para el tema del trabajo. Aunque son pocos los trabajos que relatan la Divulgación Científica sobre Biología en podcasts. Concluimos que este medio demuestra potencial para variadas aplicaciones como herramienta pedagógica tanto en la educación básica como en la superior; difusión de información masiva y lucha contra las noticias falsas; y acercar el mundo académico y el público no especializado a la jerga científica.

PALABRAS CLAVE: Biología; Difusión científica; Podcast; Revisión de literatura.