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SCIENCE COMMUNICATION AND INFORMATION IN REGIONAL DEVELOPMENT: THE OBSERVADR/COVID-19 PROJECT

COMUNICAÇÃO E DIVULGAÇÃO CIENTÍFICAS NO DESENVOLVIMENTO REGIONAL: O PROJETO OBSERVADR/COVID-19

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Abstract

The purpose of this article is to reflect on scientific communication and dissemination in the context of Regional Development, with particular attention to the digital format and taking into consideration the COVID-19 pandemic. This article presents an excerpt of a survey currently being carried out by the Graduate Program in Regional Development of the University of Santa Cruz Sul. The ObservaDR/Covid-19 research project studies the progress of the pandemic in a region of Rio Grande do Sul and provides data, information and socio-spatial analysis regarding the COVID-19 expansion to public and private administrators and the society in general. Scientific communication and dissemination make up a fundamental portion of this investigation, given the speed of the response that the research aims to give to society through its results. Based on the analysis of the digital communication contents and figures of the ObservaDR/Covid-19 project, we aim to highlight the quality and quantity of the contents being created, emphasizing regional communication focused on transparency, clarity, and presence through the use of digital communication for scientific dissemination. Among the main results, it was evidenced that in the context of the pandemic there is greater consumption of territorialized digital information, especially in places with universities and research centers, something which contributes to the access and sharing of regional scientific information and is an important process to stop the spread of COVID-19 in the regional territories.

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Resumo

O objetivo deste artigo é refletir sobre a comunicação e a divulgação científicas no contexto do Desenvolvimento Regional, especialmente a partir do formato digital e no contexto da Covid-19. O que se apresenta é um recorte de uma pesquisa-ação em andamento no Programa de Pós-Graduação em Desenvolvimento Regional da Universidade de Santa Cruz do Sul. O projeto de pesquisa ObservaDR/Covid-19 estuda o avanço da pandemia numa região do Rio Grande do Sul e fornece dados, informações e análises socioespaciais da expansão da Covid-19 para gestores públicos e privados e sociedade em geral. A comunicação e a divulgação científicas compõem uma frente fundamental nesta investigação, dada a velocidade da resposta que a pesquisa busca dar à sociedade por meio de seus resultados. A partir da análise dos conteúdos e métricas da comunicação digital do projeto ObservaDR/Covid-19, buscamos evidenciar a qualidade e a quantidade do conteúdo que está sendo gerado, enfatizando uma comunicação regional voltada para a transparência, clareza e presença a partir do uso da comunicação digital para divulgação científica. Entre os principais resultados, evidenciou-se que, no contexto da pandemia, há maior consumo de informação digital territorializada, especialmente em locais com presenças de Universidades e centros de pesquisa, o que contribui para o acesso e para o compartilhamento de informação científica regional e se caracteriza como um processo importante no sentido de conter o avanço da pandemia nos territórios regionais.

Palavras-chave: Comunicação Científica. Divulgação Científica. Desenvolvimento Regional. Pandemia.

Introduction

The new coronavirus pandemic created a scenario of uncertainty and unpredictability on a global scale. The COVID-19 outbreak was accompanied by an infodemic outbreak. The global health crisis generated, as a consequence, excessive consumption of disinformation. Much of the information consumed during the pandemic is incomplete or has been (re)produced by unreliable sources. The COVID-19 fake news network continues to spread rapidly and intensely around the world.

According to Zaracostas (2020), there were 361 million videos uploaded to YouTube in March 2020 under the terms “Covid-19” and “Covid 19”, and about 19,200 articles have been published on Google Scholar since the beginning of pandemic. Also, in March, about 550 million tweets included the terms “coronavirus”, “corona virus”, “covid19”, “covid-19”, “covid_19” or “pandemic”.

The infodemic created by COVID-19 gains popularity with misinterpretations of reality. It is possible to see that the misinformation reached many people in the pandemic, from health professionals to public administrators, including different social groups, motivated primarily by political interests.

According to Garcia and Duarte (2020, p. 1), “the excess of — often conflicting — information makes it difficult to find what is truly useful to guide people, and can make it difficult for health professionals and administrators to make decisions, especially when there is no time to assess the available evidence.” Lack of trust in governments to provide accurate information to the public contributes to the infodemic spread.

From this perspective, information verification, carried out by media groups committed to fighting fake news, has been an initiative to restrain conflicting or manipulated information about COVID-19. Another initiative of note in the fight against the coronavirus pandemic has been led by scientists and researchers, who have sought, by means of research and science, to analyze data and provide objective information about COVID-19 through scientific communication and dissemination work in their regions of work.

Scientific publication and its relation with Regional Development becomes an aspect of crucial importance to be taken into account in recent territorial dynamics, particularly at a time that requires coordinated collective action to fight the spread of the pandemic. Based on this notion, the ObservaDR/Covid-19 project emerges with the intention of helping stop the spread of the new coronavirus in the Vale do Rio Pardo region, Rio Grande do Sul. Thus, based on a theoretical

reflection and a presentation of preliminary results, this article intends to reflect on scientific communication and dissemination in the context of Regional Development, especially with respect to the ObservaDR/Covid-19 project experience.

Scientific Communication and Dissemination and Regional Development

Scientific communication and dissemination, related to the Communication Sciences field, are organized in subareas with an applied and pragmatic character, which seek to democratize access to scientific knowledge and contribute to the social discussion of specialized topics that can affect the life of society, creating transparency and clarity. According to Bueno (2010, p. 1),

(...) both processes refer to the dissemination of information in science, technology, and innovation (STI), [however,] they presuppose, in their praxis, very distinct aspects and intentions. Scientific communication basically aims at the dissemination of specialized information among peers, in order to make known, in the scientific community, the advances made (research results, experience reports, etc.) in specific areas or the production of new theories or the improvement of existing ones. Scientific dissemination has an essential function: to democratize access to scientific knowledge and to establish conditions for the so-called scientific literacy.

Although they refer to two forms of intervention (one related to peer communication and the other to the population in general — non-professional or distant from the event), we understand that planned strategies for the publication of scientific knowledge can combine both forms in order to obtain more accurate results. Especially because, as suggested by Epstein (2012, p. 21), “the publications make up a continuum, from the ‘purest ones’, intended only for specialists, to the hybrid ones, including spaces destined for CP and CS⁵, and even the massive publications, destined for a non-professional public in terms of science”.

During the COVID-19 pandemic, research centers and groups in the country and abroad have sought to provide free access to scientific information, in order to stop the spread of the virus. In addition to the pandemic, the intention is also to stop the spread of fake news.

What can also be called “peer communication” and “public science communication” (EPSTEIN, 2012) seems to be turning into a growing professional space in 2020, given the significant increase of presence of scientific information in traditional private or public media (including social media) since the outbreak of the pandemic, with permanent coverage of the advances in health research and the decisions of the World Health Organization and its repercussions worldwide. The constant mention of scientific sources in news programs and other media indicates that scientific knowledge is held in high regard in this unique moment, even though the pandemic has evidenced the existence of anti-science movements in many countries.

Bueno (2010, p. 2) understands that:

(...) scientists and researchers are on the margins of a sophisticated production system that incorporates interests, financial and technological resources, methodologies of analysis or measurement and that, therefore, can possibly, even in science and technology considered cutting edge or ‘on the borderline’, achieve far-reaching results.

However, some epistemological and ontological obstacles related to the dissemination of scientific purposes should be highlighted. One of them refers to the need for some “translation” for society of a scientific purpose, something that, when it occurs, ends up handling a scientific purpose in its reality of common-sense purpose (EPSTEIN, 2012). In the same sense, there is a need for detachment from the hermetic language of scientists and adaptation to the grammars of operation of the media through which the dissemination will occur, with their formats, times, spaces, and languages.

In this context, when it comes to scientific production, telematic networks have been challenging, as they offer possibilities never before imagined for global scientific diffusion, integration, and communication (FELIPPI et al, 2013). Networks made up of digital media (websites,

⁵ According to the author, CP refers to primary communication, which happens between peers, while CS refers to secondary communication, from science to society. (EPSTEIN, 2012).

blogs, social media, electronic mail, various apps) enable virtual interactions by means of videoconferences, classes, meetings, lives, chats, and message trading, which organize teaching, work, and research. The interactions are facilitated by the existence of libraries, databases, and virtual scientific publications that can be accessed in real time from a distance.

The use of these networks by universities has resulted in numerous interesting, innovative, and creative experiences. There is also a range of possibilities not explored or poorly explored by researchers and their institutions. With the COVID-19 pandemic, scientific dissemination experiences have intensified (as well as scientific communication) through lives and virtual scientific conferences and events.

The advantages of these experiences have been centered in three elements: range, speed, and interactivity in accessing knowledge. That is, common situations have changed with digitalization — a few decades ago, in countries like Brazil, production was often restricted to the internal knowledge of the institution that generated it, recorded in printed documents (reports, dossiers, etc.) or shared in printed scientific journals circulating in a region or in the country (and even so, with limitations of scope). Such change occurs with the availability of research reports for consultation, as e-books or digital scientific journals, and, above all, with dissemination through the coverage of science by the media. In addition to the range, the speed of access is remarkable, as is the possibility for readers to return to the academic community, which has opportunities for communication facilitated by information and communications technology (ICT)⁶. When it comes to research on regional development, and considering the recent characteristics of the spatialization of Graduate Programs focused on the subject in Brazil, the use of these technologies for scientific articulation, integration, and dissemination reveals numerous possibilities (FELIPPI et al, 2013).

The use of digital media as a way of disseminating information and scientific contents has expanded the possibilities of democratizing ICTs, both in terms of access and production of contents, enabling contact with information, cultures, and mentalities of audiences previously excluded from this process, including in this access possibilities of interactivity (FELIPPI et al, 2013). However, fake news has spread with the same speed.

ObservaDR and the ObservaDR/Covid-19 Project

The Regional Development Observatory aims, by means of an interinstitutional research network, at organizing and instrumentalizing access and dissemination of scientific studies, technical reports, data, and information about regional development. It is a research and extension network created in 2012 and which currently articulates 27 Graduate Programs in Regional Development and related fields of Brazilian institutions, and which also has seven associate institutions “that gather with the purpose of reflecting on and analyzing the regional development processes in the country, taking into account regional particularities and contexts at different stages of development, and governmental and civil society institutions that address and/or act in this context” (OBSERVADR, 2020).

In this sense, some of its objectives are preparing, updating, and providing regional databases with statistical and spatial information about the municipalities and the respective regions that are the object of analysis and research by the various Graduate Programs and research institutions that are part of the ObservaDR network.

This initiative intends to provide citizens in general and public and private (governmental and non-governmental) institutions with the selection and accessibility of data and information considered relevant to characterize, diagnose, and assess potentialities, limitations, dynamics, and processes related to regional development and planning.

As part of the ObservaDR's scope is the spread of knowledge built in a network, simultaneously to its creation and development, its own media was created to support scientific dissemination. The means that make up the activities of the Regional Development Observatory are the institutional portal and the digital media (presence on Facebook, Instagram, YouTube, Flickr, and WhatsApp)⁷. The portal offers technical and scientific information, including four regional

⁶ ICT is understood as the new media, which comes with the internet, computers, and cell phones.

⁷ The portal is hosted at <http://www.ObservaDR.org.br>, and the pages on social media are at <https://www.Facebook.com/ObservaDR/>, <https://www.youtube.com/channel/UC6PHFmMYAgeJhNii5PcRkkg>, <https://www.instagram.com/ObservaDR/>, and https://www.flickr.com/photos/observa_dr/.

databases, access links to most scientific journals, theses and dissertations, and open-access e-books in the field of Regional Development. It also presents the schedule of annual events and dossiers for scientific journals, approximately eighty video interviews, and a dozen podcasts produced by ObservaDR with Brazilian and foreign researchers, among other information.

With the arrival of COVID-19 in Brazil in mid-February and the alerts from WHO and the international press concerning the impact of COVID-19 on the world (especially due to the high number of cases and deaths in Europe and the United States), sanitary and social isolation measures were adopted to control the spread of the new virus in Brazil. These measures came into force in the country in March 2020, however, there was disharmony in the different governmental spheres, as economic and social discussions at that moment had ideological implications.

The coronavirus pandemic has been considered by WHO experts (2020) as the worst global health crisis in recent decades, and it is consequently the worst economic crisis too, causing social chaos and leading to institutional collapse in several countries.

In this context, characterized by deep social, political, and economic uncertainty, the increase in the spread of fake news and the current discredit of science made the mission of reflecting on the socio-spatial dimension of the pandemic in Brazil more difficult. The pandemic must be seen in its specificities. It was based on these concerns that teachers, students, and civil society organizations joined forces to create the Production of Socio-Spatial Information to Support Coronavirus Prevention Actions in Santa Cruz do Sul and the Vale do Rio Pardo Region project, which is succinctly called Regional Development Observatory/Covid-19.

This project intends to offer secondary data and thematic maps, with notes and scientific information based on social, demographic, infrastructure, and health variables of the population and households in the neighborhoods of the municipalities of Santa Cruz do Sul and Venâncio Aires, and regional maps and data about the Vale do Rio Pardo region. The intention is to provide information that is useful for action planning and decision making to prevent and fight the coronavirus pandemic, as well as to provide the society with scientific information. The information that is made available is based on official data from IBGE, DATASUS, the local governments of Santa Cruz do Sul and Venâncio Aires, the Office of Health of the State of Rio Grande do Sul, among other institutions.

The project is a pragmatic survey/action that seeks to provide answers to society, frequently in a shorter time than science usually takes, and it is even based on the dialogue and participation of the organized society, companies or governments. The initiative of this database is carried out in a collaborative and voluntary fashion by approximately 20 professors/researchers, undergraduate and graduate students from the University of Santa Cruz do Sul/RS⁸, architects and engineers from SEASC, and technicians from the Municipal Office of Planning, Budget, and Administration, the local government of Santa Cruz do Sul/RS, the Office of Planning and Urbanism, the local government of Venâncio Aires, and the Regional Development Council of Vale do Rio Pardo. The ObservaDR/Covid-19 proposal is part of the Regional Development Observatory (ObservaDR) of the Graduate Program in Regional Development (PPGDR-UNISC), in partnership with the Geography, Social Communication, and Architecture and Urbanism degree programs of the University of Santa Cruz do Sul/RS, the Society of Engineers and Architects of Santa Cruz do Sul (SEASC), the Municipal Office of Planning, Budget, and Administration of Santa Cruz do Sul (SEPOG), the Office of Planning and Urbanism of Venâncio Aires (SPU), and the Regional Development Council (COREDE) of Vale do Rio Pardo.

With the Regional Development Observatory/Covid-19 project, we intend to express a view about the demographic reality, the regional social and economic reality, taking into account that the pandemic affects various locations and at different times. In this sense, the analysis of this project can help control and prevent COVID-19 in this territory. Scientific dissemination, especially in digital form, has a relevant role in the context of the pandemic, in the same way as scientific communication, through traditional scientific articles and presence in academic events.

Scientific Communication and Digital Scientific Dissemination in ObservaDR/Covid-19

For the researchers and other agents that produce contents and information for the Observatory's various media — and above all, connected with the ObservaDR/Covid-19 Project —, the measurements can be used with the intention of better understanding the profile of users and

⁸ The research is led by Rogério Leandro Lima da Silveira, who is also the head of the Regional Development Observatory.

how the information disseminated is able to move around in a given social group of users and which are the influential users in the group for such information to move (RECUERO et al, 2015).

The strategy for communication adopted by the project aims to give visibility to the data collected, therefore making the analyses to reach not only researchers in the field of Regional Development, but, above all, regional administrators and the society in general.

As it is understood that this information is of public interest, and in order to assist in providing information for health and social assistance administration during the pandemic, several means were used, through an organized strategy, starting in May of 2020 with no scheduled closing date. The strategy was planned by researchers and doctoral and undergraduate students from Social Communication (Public Relations, Journalism, and Audiovisual Media Production) who are part of the ObservaDR/Covid-19 team. The proposal is summarized in Chart 1:

Chart 1: Summary of the scientific communication and dissemination planning

ACTIVITY	PERIOD/2020*
Creation of a menu and a banner with visual identity on the website for the ObservaDR/Covid-19 project.	May
Publication of data, maps, and technical notes on the ObservaDR portal.	May (no scheduled closing date)
Add words (greater visibility to the ObservaDR portal in Google searches).	May
Creation and dispatch of information releases about the project to regional and state press (distribution assisted by the Office of Communications of UNISC).	May and June
Publication of releases on the UNISC and ObservaDR portals and on the website of the Graduate Program in Regional Development, and for the network of researchers and research organizations in the PURD field.	May and June
Creation and publication of posts on social networks of ObservaDR and UNISC, organic multiplication by project members on their personal pages.	From May on (no scheduled closing date)
Scheduling of interviews with regional and state media with coordinators and researchers from the project.	From May on (no scheduled closing date)
Publication of the project link on portals of local governments and the Regional Development Council (COREDE Vale do Rio Pardo).	May
Organization and execution of a webinar and lives.**	From August to December
Production of scientific articles for academic events and scientific journals.**	From August to December

* Activities scheduled for 2020. Should the project be extended in 2021, the planning will be revised.

** The team researchers are responsible for the execution of webinars and lives and for the scientific production.

Source: prepared by the authors.

The first and most important action is to make information available on the ObservaDR portal, in a menu created specifically for the project on Covid-19, with visual identity (banner). The portal is the repository of all project's production: maps, data, and analyses. From the portal, the other actions and media can be accessed. The portal is aimed at both scientific communication and dissemination, and uses a style and language that keep the density of information, but make it accessible to users with varying degrees of familiarity.

Image 1: ObservaDR institutional portal and ObservaDR/Covid-19 project

Source: Regional Development Observatory portal.

Cartographic maps and technical information were made available on the portal and on digital social networks. By the end of September 2020, 54 maps and graphs and 38 spreadsheets had been produced, all including analyses. The maps, graphs, spreadsheets, and analyses were built collaboratively by the general project team and made available on the portal and other media by the group related to research communication. Seven podcasts were also produced by the researchers, which allowed access to the analyses via audio.

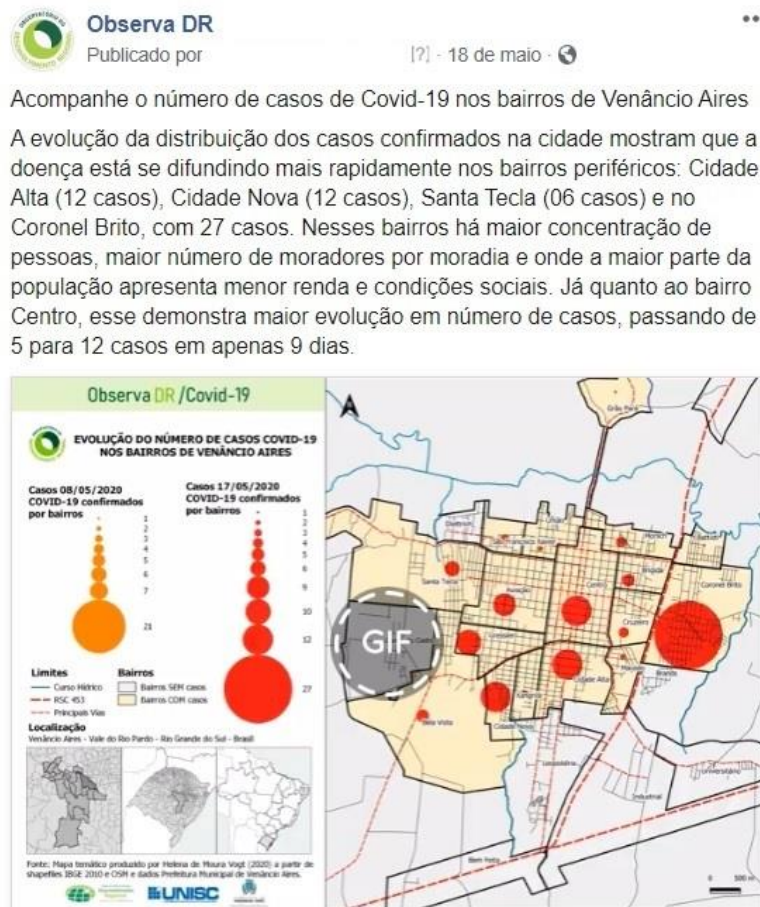
The publications have a specific layout, as shown in Image 2, with the project's name, and the logos of ObservaDR and other partners. Cartographic maps are initially published on the portal and then on digital social networks. At the end of the week, data and information are compiled and sent to the local and regional press before the weekly deadline or the deadline for the weekend editions of printed newspapers and news portals, in addition to being sent to radio stations and television channels through a list on WhatsApp with journalists from those media.

Image 2: Publication of a map and analysis on ObservaDR portal

Source: ObservaDR portal, ObservaDR/Covid-19 link.

Regarding scientific communication, there were releases sent to the local, regional and state press, and contents for Facebook, Instagram, and WhatsApp, whose numbers can be seen in Image 4.

Image 3: Publication of a cartographic map on Facebook



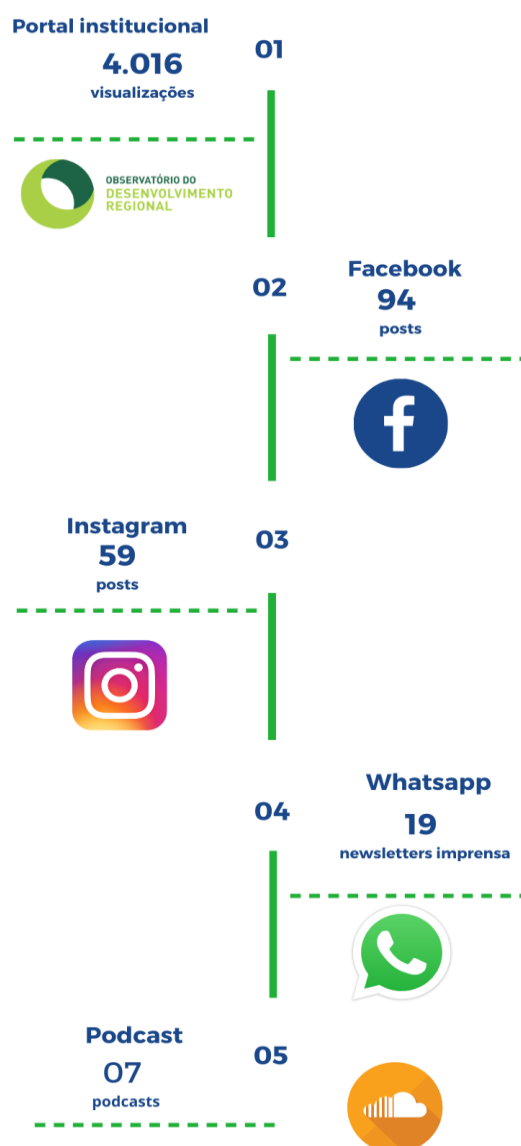
Source: ObservaDR's page on Facebook.

The releases were prepared and sent to the regional press with more specific topics, with the intention of giving visibility to the most relevant data of the project, such as, for example, number of cases by neighborhoods in certain municipalities, presence of slaughterhouses and cases of COVID-19 in the region, availability of ICU beds, among other relevant information. Three releases were sent, which during the project were replaced by a weekly information summary sent to a WhatsApp group with local journalists, especially to update the information for the local and regional press, as can be seen in Image 4. The researchers involved in ObservaDR/Covid-19 have been asked by the regional media to give interviews as qualified sources (mainly to radio and newspapers), and these interviews are often reproduced on the portals of communication groups. Around fifteen interviews were given to regional radios and newspapers, and there was just around the same number of publications in the regional electronic press⁹.

Some data were quantified, and special attention should be given to communication in individual digital media, since this article focuses, next, on the analysis of the repercussions of these actions.

⁹ Exact quantification of the published material is still being carried out by the project team.

Image 4: Infographic about the digital scientific communication and dissemination of the ObservaDR/Covid-19 project



Source: prepared by the authors, based on the information collected.

Regarding scientific communication, part of the dissemination reached the academic audience: especially the contents stored on the portal and replicated on social networks, which reach researchers not only in the area of Regional Development. However, two actions were especially aimed at peer communication, which were ten activities in the webinar/live modality and lectures in a meeting and colloquium. Two webinars/live with international and national reach and four with regional audience, and three lectures at events. These activities had between thirty and one hundred participants, varying according to the event. Finally, another action of scientific communication is the production of articles for scientific journals, which is still ongoing (three texts were produced by the end of September).

Media in the Source and ObservaDR/Covid-19

The institutional portal is the main repository that gathers the indicators and data on the ObservaDR/Covid-19 project. The portal is a unique platform, with information about teachers, institutions that make up the network and associate institutions, in addition to dissemination of productions (articles, books, and research reports) and scientific projects. It is an interactive tool

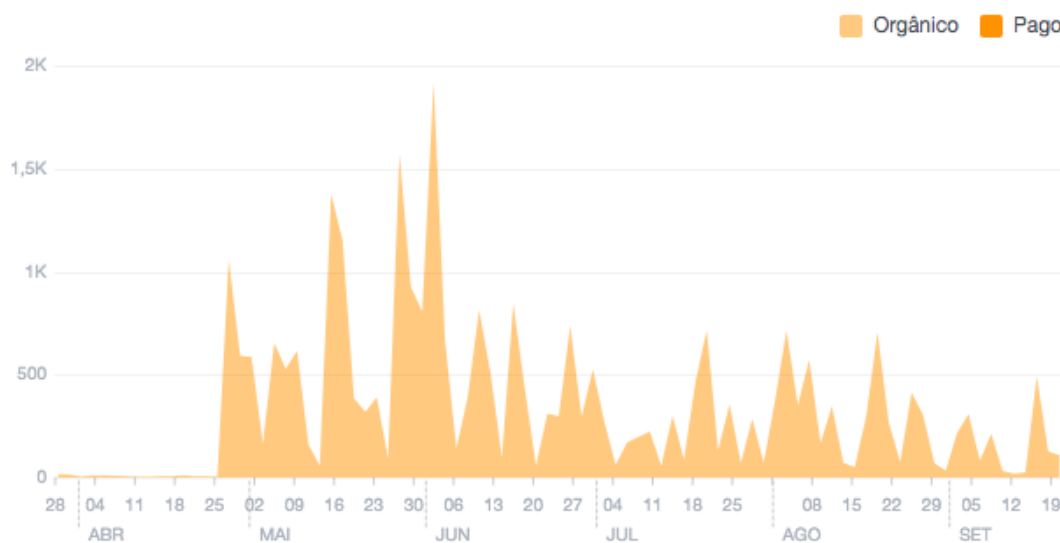
that seeks to disseminate and strengthen teaching, research, and extension actions in the field of urban and regional planning.

Google Ads data shows that there were 4,016 views between August and September. The average navigation time for visitors was 1 minute and 15 seconds. About 82% of visitors were visiting the portal for the first time, whereas 18% were former visitors. The main countries of origin of visitors were (in particular order): Brazil, United States, Italy, Argentina, and Australia. Concerning access to the portal, 51% of it was via desktop, and 49% via mobile phone. The main references that led visitors to the portal were: Facebook, the portal of the municipality of Venâncio Aires, the portal of the National Association of Graduate Studies and Research on Urban and Regional Planning (ANPUR), and the website of the University of Santa Cruz do Sul.

When it comes to digital media, Facebook is the platform that has offered greater coverage in terms of spreading the news about the project organically, without using payment incentives. Based on this social network, the period from April to September 2020 was chosen for analysis of the figures, which includes the launch period of the Covid-19 project. The first post that made reference to the project was on April 27, and it highlighted the publication of the first socio-spatial information to support actions to prevent the new coronavirus. This is, therefore, a cut-off date for analyzing Facebook data within the defined period.

In Image 4, which graphically represents the data related to the reach of the Facebook posts of the ObservaDR page, a peak was recorded in the months of May and June, which is thought to be related to the release of information from the Covid-19 project, reaching 3,471 people. However, it is possible to see that in the period before April 27, within the specific time range, there were only two posts on the page. The reach of people after the launch of the project happened organically.

Image 5: Reach of Facebook posts in April–September 2020

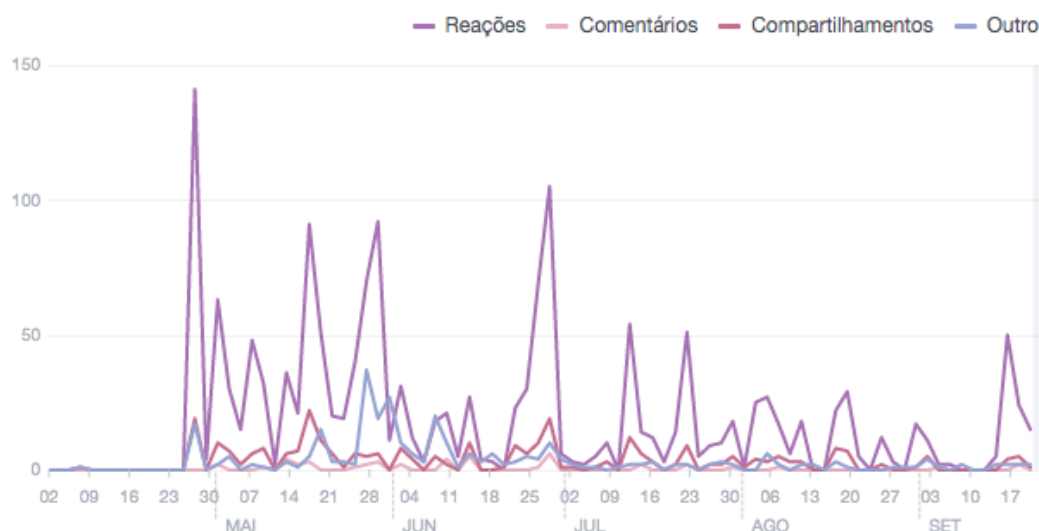


Source: Facebook Insights.

The page followers are measured by the number of people who like it. This measurement is divided between likes and dislikes. During the analysis period, there were 1,498 likes and 12 dislikes. The vast majority of likes happened through the news feed.

Regarding reactions, comments, and shares, there were more reactions compared to comments and shares. However, the low number of shares in the period encourages us to review strategies to expand the dissemination of project data and information via Facebook, with the particular goal of breaking the “bubble” of shares and attract not only researchers, students, and teachers, who are the largest audience on Facebook and Instagram.

Image 6: Graph with the number of reactions, comments, and shares on Facebook between April and September 2020



Source: Facebook Insights.

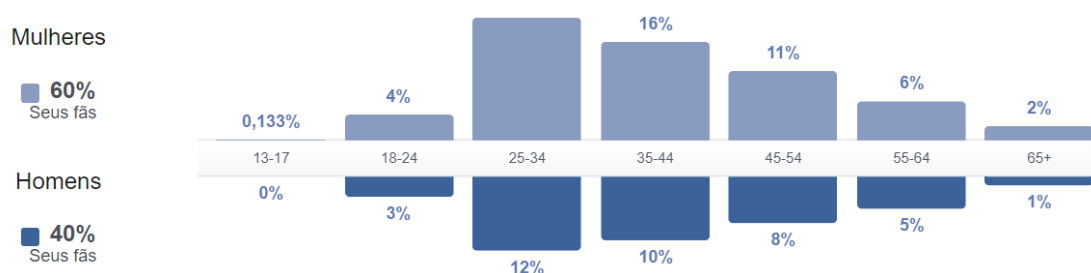
The reactions are expressed by “Like”, “Loved”, “Wow” and “Sad”. The number of likes reached its peak on the ObservaDR Facebook page on April 27, the day after the first socio-spatial information was released by the ObservaDR/Covid-19 project, as shown in Image 6.

On that date, specifically, two articles from the regional press about the start of the project were shared on the page. Growth is seen again on May 18, after a map is posted with the evolution of the confirmed cases of COVID-19 in the neighborhoods of the municipality of Venâncio Aires, in GIF format — an animation that showed the spread of the disease (Image 3). In the last week of June and the beginning of July, the reactions intensified, coinciding with the growth in the number of cases of COVID-19 in the Vale do Rio Pardo region.

The analysis of data regarding the reach and involvement of followers by post provides data on the spatiality of the project and the networks that make it up. Posts that involved ObservaDR’s associate subjects, institutions and/or projects had greater reach and engagement. This is the case, for example, of the dissemination of the first webinar conducted by the project, about the territorial dynamics of the pandemic in Brazilian regions, with the participation of associate researchers, reaching 1,700 people, and also posts on the dissemination of results of the “The Impact of COVID-19 in the Direct Commercialization of Family Agriculture in RS” project, a partnership between ObservaDR and the Graduate Program in Regional Development of UNISC, with researchers from the Federal University of Santa Maria, from the Federal University of Rio Grande do Sul, and also from Emater, reaching 2,600 people.

Other data provided by Facebook make it possible to verify that the contents shared on the ObservaDR page are consumed mainly by an audience aged between 25 and 44 years old, 60% female and 40% male, as shown in the graph of Image 5.

Image 7: Percentage of women and men involved in Facebook posts from April to September 2020



Source: Facebook Insights.

Those fans, as they are called by the social network, are particularly concentrated in the state of Rio Grande do Sul, with the first five municipalities with the most of them being Santa Cruz do

Sul (489 followers), Porto Alegre (154 followers), Santa Maria (48 followers), Venâncio Aires (34 followers), Vera Cruz (29 followers), and Lajeado (18 followers), respectively.

The figures show that access to digital scientific communication and dissemination of the ObservaDR/Covid-19 project among users occurs in a territorialized way. Based on the users' place of origin, it is possible to realize that there is certain concentration of accesses in the municipalities of Rio Grande do Sul (especially in the Vale do Rio Pardo region), where the scientific dissemination related to the project has been produced and disseminated and on which the project focuses. This may mean that there is need for individuals to increase their awareness in relation to the reality of their surroundings in situations such as an unprecedented health crisis, such as the one we are experiencing.

Conclusion

The goal of science is not just to accumulate information; its goal is to produce and socialize knowledge, especially for collective decision-making about real situations or problems. This was the main challenge that the team of the Regional Development Observatory was conditioned to when it decided to carry out the study related to the expansion of the pandemic in the region of Rio Grande do Sul and to disseminate scientific information more directly to the public. It also had the intention of potentializing interaction and stimulating actions that promote regional development based on the provision of good and reliable local/regional information, which can empower administrators and the society for their choices.

There is no socialization of science without communication. Communication plays a central role in the dissemination of scientific research and in the establishment of scientific knowledge in its local/regional context. In times of ICT/media ubiquity and strength of conventional and new communication systems (social media), science cannot give up this tool, especially because the media have been channeling professionally-prepared disinformation. The association of scientific communication and dissemination through creative strategies has proved to be an interesting path, as seen in ObservaDR/Covid-19. Including strategies that can deal with the challenges, limits, and obstacles that exist in the transposition of scientific knowledge for its consumption by the society in general.

Likewise, producing knowledge in an interinstitutional way and with social subjects other than traditional research organizations — building science in dialogue with the State and organized society —, proved to be a rich and correct path in terms of applicability of the knowledge generated.

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