

COMMUNICATION OF CIVIL DEFENSE AGENCIES IN BRAZIL: HIGHLIGHTING RISKS OR DISASTERS?

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ABSTRACT

According to the Brazilian National Policy for Civil Defense and Protection (PNPDEC), the actors involved in civil defense systems, at all spatial scales (from national to local), must adopt the necessary measures to reduce disaster risks, seeking to give priority to preventive actions related to disaster reduction. In this study we analyze the way that some civil defense agencies are communicating with their external audiences to verify whether the PNPDEC guidelines are being met in the messages produced by professionals in this area. To this end, we analyzed the contents of Facebook publications of civil defense agencies from five Brazilian states, one per region, and also those published on the Ministry of Regional Development page, in which the National Secretariat for Protection and Civil Defense is included. The results show a predominance of publications associated with the disaster response phase and, consequently, with the disclosure of actions more related to disasters than prevention.

KEYWORDS

Risk communication; Disaster communication; Civil defense agencies; Brazil

COMUNICACIÓN DE LOS ORGANISMOS DE PROTECCIÓN CIVIL EN BRASIL: ¿ÉNFASIS EN RIESGOS O DESASTRES?

RESUMEN

De acuerdo con la Política Nacional de Defensa y Protección Civil (PNPDEC) de Brasil, los actores involucrados en los sistemas de protección y defensa civil, en todas las escalas espaciales (desde el nivel nacional al local), deben adoptar las medidas necesarias para reducir los riesgos de desastres, buscando dar prioridad a las acciones preventivas relacionadas con la minimización de desastres. Este artículo analiza cómo algunos organismos de protección y defensa civil se están comunicando con sus audiencias externas, con el fin de verificar si los lineamientos del PNPDEC se están cumpliendo en los mensajes producidos por los profesionales en esta área. Para ello, se analiza los contenidos de las publicaciones en Facebook de cinco organismos estatales de defensa y protección civil, uno por región, y también los publicados en la página web del Ministerio de Desarrollo Regional (MDR), en la que incluye a la Secretaría Nacional de Protección y Defensa Civil (Sedec). Los resultados muestran un predominio de publicaciones asociadas a la fase de respuesta y, en consecuencia, a la publicación de acciones más relacionadas con los desastres que con su prevención.

PALABRAS CLAVES

Comunicación de riesgos; Comunicación de desastres; Organismos de protección y defensa civil; Brasil

COMUNICAÇÃO DOS ÓRGÃOS DE PROTEÇÃO E DEFESA CIVIL NO BRASIL: ÊNFASE NOS RISCOS OU NOS DESASTRES?

RESUMO

Segundo a Política Nacional de Proteção e Defesa Civil (PNPDEC), os atores envolvidos nos sistemas de proteção e defesa civil, em todas as escalas espaciais (do nacional ao local), devem adotar as medidas necessárias à redução dos riscos de desastres, buscando dar prioridade às ações preventivas relacionadas à minimização de desastres. Este artigo analisa como alguns órgãos de proteção e defesa civil estão se comunicando com seus públicos externos, a fim de verificar se as orientações da PNPDEC estão sendo atendidas nas mensagens produzidas pelos profissionais dessa área. Para tanto, analisa os conteúdos das publicações de Facebook de cinco órgãos estaduais de proteção e defesa civil, um por região, e também aquelas divulgadas na página do Ministério de Desenvolvimento Regional (MDR), na qual a Secretaria Nacional de Proteção e Defesa Civil (Sedec) se insere. Os resultados evidenciam uma predominância de publicações associadas à fase de resposta e, consequentemente, à publicização de mais ações relacionadas aos desastres do que à prevenção.

PALAVRAS-CHAVE

Comunicação de riscos; Comunicação de desastres; Órgãos de proteção e defesa civil; Brasil

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INTRODUCTION

Civil defense actions in Brazil are guided by Law 12,608, which establishes the National Policy for Civil Protection and Defense, the PNPDEC (Brasil, 2012). The PNPDEC has guidelines, objectives, and competences that require the planning and articulation of communication strategies for disaster risk reduction (DRR), development of a national culture of disaster prevention, fostering of cities' resilience, production of early warnings about the possibility of disasters, guidance on appropriate prevention and response behaviors, and promotion of self-protection. Although these objectives, guidelines and competences depend on the communicational field, this is an area still seen as peripheral within the scope of the National Civil Defense and Protection System (Sinpdec). The diagnosis on the capabilities and needs of municipal civil defense offices, developed within the scope of the Elos Project, identified that there are many gaps in terms of risk communication and disaster communication, not only at the local level, but also at the state and federal levels (Brasil, 2021).

In this manuscript, we analyzed the way civil defense agencies have communicated with their audiences through Facebook, the social media with the highest number of users in Brazil in 2021, according to the annual report of "We Are Social and Hootsuite". We carried out analyzes of the products issued and published by five State Civil Defense Coordinations (Cedecs) and also by the National Secretariat for Civil Protection and Defense (Sedec), through the website of the Ministry of Regional Development (MDR). We collected publications in a six-month period, between January 1 and June 30, 2021, and applied Content Analysis (Bardin, 2014) to verify which were the main issues disseminated by the civil defenses.

It is important to highlight the absence of a structured research area covering risk and disasters under the Communication approach. In Brazil, studies in the area of risk communication are recent (Delevati & Amaral, 2013) and are often associated with environmental communication. In the area of disasters, there are investigations addressed towards press coverage, but not towards the communicational performance of civil defense and protection professionals.

There are several branches which discuss, with more or less emphasis, how Journalism (which can be considered a subfield of Communication) covers disasters and risks (Amaral, Lozano Ascencio & Cristobal, 2020), how we can communicate to reduce the differences in risk perception between technicians and the affected population (Powell & Leiss, 2005), how to carry out crisis management within institutions (Prestes Alves, 2007), and how to improve the communication of climate change, which causes more disasters (Loose, 2020), among other specific studies.

Considering the specificities of the area of civil defense, a stronger association of risk communication with disaster communication is advisable, in order to strengthen the interface of Communication with the interface of Civil defense, in an integrated way. The intersection of the two proposals meets the aspects contained in the risk and disaster management cycle (Figure 1), articulating specific interventions for each of the phases: prevention, mitigation, preparation, response and recovery. Thus, this approach encompasses the communication, through different strategies, channels and languages, of the actions linked to this cycle in all its phases.

According to the Sedec (Brasil, 2017), prevention actions are part of the pre-impact phase. An example of preventive actions is the planning measures for the occupation of the geographic space, to prevent new disaster risks from being installed and also to meet, for example, the housing deficit, through the construction of housing in safe places. Mitigation actions are corrective, involving engineering works, improvement of services, installation or improvement of warning systems, among others. Response actions, on the other hand, refer to relief activities, restoration of essential services and assistance to those affected, that is, emergency measures aimed at serving the population (Brasil, 2017). Finally, the recovery and reconstruction actions aim to "recover the infrastructure and restore, in its fullness, public services, the economy of the area and the well-being of the population" (Castro et al., 2004).

All phases of the risk and disaster management cycle comprise actions that can be either structural or non-structural. Structural actions refer to the execution of engineering works and services in areas considered to be at risk, with a view to reducing them, such as, for example, retaining slopes to reduce the risk of landslides, improve urban drainage and provide basic sanitation to minimize discharge of wastewater on the soil of the slope. Non-structural measures generally involve actions related to educational, informational and community involvement activities.

Examples are the installation of warning systems that support actions to evacuate risk areas and emergency preparedness activities, which include carrying out simulated evacuations, educational campaigns, etc.



Figure 1. Cycle of management of risks and disasters

Source: Sedec, Brasil (2017), available at <https://www.defesacivil.rs.gov.br/upload/arquivos/201710/05172051-01-gestao-de-risco.pdf>

These civil defense actions are organized in the form of a national system, the Sinpdec, composed by: a consultative body, represented by the National Council for Civil Defense and Protection; a central body (Sedec), responsible for the articulation and technical coordination of the Sinpdec; state and Federal District bodies, which have a series of powers defined in law 12,608/2012; municipal civil defense bodies, which are responsible for implementing risk and disaster management actions at the local level; and sectoral bodies, from the three levels of government. It is also worth noting that the Sinpdec can mobilize civil society to act in a disaster situation, coordinating logistical support for the development of civil defense actions (Brasil, 2017).

COMMUNICATION OF RISKS AND DISASTERS

Risk communication is a practice that needs to be developed on a daily basis, unlike disaster (or crisis) communication, which is revealed at atypical times. Therefore, investment in communication before the disaster must be a priority, in a permanent way, based on the precautionary principle (Carvalho & Damacena, 2013) and aiming at DRR.

As discussed by Bueno (2013), in some cases, crises and/or disasters are intensified because there is no adequate risk management (identification, monitoring, measures to mitigate hazards, vulnerabilities, damage, etc.). When institutions do not act preventively, the damage can be irreversible and the costs of containing the problem can be much higher than those necessary to avoid it. Furthermore, communication is seen by many managers as superfluous, being remembered only sporadically and only as a product (not as the process it really is). Communication is a fundamental part of the management of any institution and needs to be aligned with all decision-making.

Many organizations do not include communication as a priority in the crisis planning process and find it difficult, sometimes unsurpassed, to interact with their stakeholders when they occur, almost always remaining in the wake of events (Bueno, 2013, p. 54).

The communication of risks carried out by organizations is essential to provide a reliable source of information to turn to, instead of amplifying distorted facts. It is important to note that one of the functions assigned to mass communication vehicles is to provide public warning about dangers and risks that can affect the population (McQuail, 2013), however, information gaps, derived from

the silencing of official sources, can open space for alarming and/or distorted information. Powell and Leiss (2005, p.190) highlight that:

[...] the failure to implement a good risk communication practice gives rise to a vacuum in risk information. [...] this failure can have serious and costly consequences for those who are held responsible for the protection of public interests.

Considering that society does not approve this vacuum, the most effective strategy is to maintain transparency and an open channel of dialogue with different audiences, including the press, which must be seen as an ally at all times, as it allows information to reach a large number of people in a short period of time, with the seal of credibility.

Powell and Leiss (2005) note that the expression “communication about risks” is recent, used from 1984 on, with the growing interest in risk perception studies, which tried to discover why the views on risks were so different between groups and individuals. Since then, several phases or emphasis have been given to this issue, which has always been crossed by a practical objective: to improve the dialogue between the public involved in the risks in order to obtain more effective results in its management process.

On the other hand, although the communication about disasters and emergency situations may be associated with risk communication, it takes place when the risk becomes a tragic event. It is a type of communication that is heavily discussed from the perspective of journalistic coverage, debating the limits of dramatization and the use of victims' testimonies, for example. The field of Communication is very segmented and, in some cases, discussions about risks and disasters are addressed to health communication, environmental communication or scientific communication (focusing on topics such as nuclear energy or technological development, for example). Risk and disaster reduction appears in a fragmented way, and it is difficult to find specific literature at the national level. The articulation with the area of civil defense is still weak, although necessary. It is possible to find manuals aimed at communicators and journalists that deal with practical aspects for DRR (e.g. Unesco, 2011; Itaú/Unibanco, 2013), but they lack systematic studies to guide specific public policies for the area.

The systemic view, which is fundamental for civil defense work, must also be addressed to communicational actions, so that we can add strategies at all stages of the risk and disaster management cycle, from prevention to recovery. The continuity of the initiatives is an important element to generate a culture oriented towards prevention. The main issue is the lack of a joint and long-term vision in this area:

The communication process, before, during and after the occurrence of environmental catastrophes, has not been planned in an integrated and competent way, so that it does not contribute, as expected, to reduce risks, mitigate losses or stimulate public debates to neutralize the risks that are invariably associated with these phenomena. (Bueno, 2018, p.6).

Considering the guidelines, objectives and competencies of civil defense agencies, it is understood that the investment in risk communication, aimed at preventing and mitigating damage, should be much higher than the emphasis on communication about disasters. Although the PNPDEC deals with all phases of the risk and disaster management cycle, it is imperative to avoid worst-case scenarios and, consequently, to devote more attention to risks.

COMMUNICATION IN THE SCOPE OF CIVIL DEFENSE

Although studies on the interface of Communication with the area of Civil Defense are scarce in Brazil, research shows that there is a great concern about the best way to publicize weather and risk warnings (Marchezini et al., 2017; Marchezini & Londe, 2018; Horita, Albuquerque & Marchezini, 2018; Saito, Lima & Assis, 2019). The study carried out by the Elos Project identified that the communicational aspect has often been reduced to the issue or disclosure of warnings (Brasil, 2021). According to Londe, Soriano and Coutinho (2015), although the Sinpdec communication system determines a permanent communication between all spheres of the national system, in practice, municipalities report difficulties in dialoguing with Federal Institutions. In 2021, this finding was reinforced by the data collected by the Elos Project (Brasil, 2021).

Other relevant information is the lack of specific press offices for Sinpdec members, in all spheres, and the lack of financial resources intended for preventive actions (Damacena et al., 2022). If the financial resources are oriented towards the response phase, it is not surprising that the work of professionals and their dissemination will be triggered by the disaster. In this sense, although the PNPDEC (Brasil, 2012) reinforces the role of Sinpdec in integrated actions, with emphasis on prevention, the execution of the work is tied to the release of financial resources, which does not privilege risk management.

METHODOLOGY AND ANALYSIS OF PUBLICATIONS BY CIVIL DEFENSE AGENCIES

In order to verify which contents were being disseminated by the civil defense agencies, five Facebook pages of the Cedecs were selected, one per region and one from the Ministry of Regional Development (MDR), which includes the Sedec. Facebook is the most accessed network by Brazilians and the sample was selected based on the frequency and correctness of publications (we chose pages that should have recent publications during the data collection period) and on the attempt to study different regions of the country. The time frame of the analysis was six months (from January 1 to June 30, 2021) and the methodology applied was Content Analysis (Bardin, 2014), which seeks to analyze the messages quantitatively and qualitatively from categorizations, which must be mutually exclusive.

For this article, we analyzed the Facebook pages of the state agencies of civil defense of Amazonas, Mato Grosso, Minas Gerais, Pernambuco and Rio Grande do Sul (Figure 2), in addition to the Sedec content published on the MDR page.



Figure 2. Brazilian States with Facebook posts analyzed in this work
Source: Authors, 2023

In an analysis of content, a relevant method refers to the categorization of meaning of each message. This process can be done either “a priori” – before the analysis, starting from the research problem, its objectives and literature review – or during the analysis, from the reading

of the collected material and establishment of repeated cross-sections between the material and the theory (Franco, 2008). In this study, the definition of the topics was done after a first reading of Facebook posts, in an attempt to articulate the content with the disaster management cycle. Five thematic categories were created to respect the principles of mutual exclusion, with the goals of assuring no superposition, pertinence, relevance for the research objectives, reliability and objectivity, to properly code the messages.

Based on the five thematic categories, the number of contents published in the period on each of the pages was quantified. The category “Weather bulletins or warnings” brings together different publications that seek to inform the population about foreseen meteorological events that can cause problems. The category “Ephemerides” refers to commemorative publications or important events in the area that took place on the date. “Promotion of events, publications and training” are those posts that aim to publicize actions carried out by civil defense agencies. The category “Information about covid-19” was included because, in some cases, the civil defense agencies took on hygiene actions, support to vaccination and promotion of social distancing measures.

The fifth and last category, called “Publication of risk and disaster management work”, encompasses activities related to all phases of the management cycle, which involve the daily life of civil defense professionals. This category was subdivided into: “Before (prevention)”, “During (disaster)” and “After (recovery)”, so that it is possible to verify which is the most recurrent communication displayed on the institutional pages of these agencies.

The analyzed pages showed particularities, but, in general, the disclosure of actions during disasters, with a focus on response actions, appears in most states (lighter blue color, Figure 3) and is predominant in Sedec's contents published on the Facebook of the MDR and in the state of Amazonas, if we exclude the atypical reports of Covid-19.

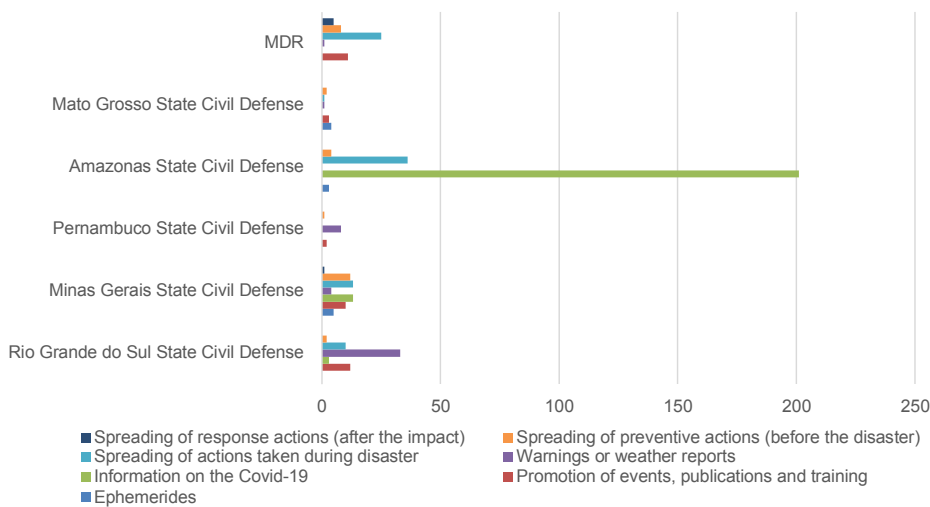


Figure 3. Comparison of the analyzed Facebook pages
Source: Authors, 2023

We also identified a large volume of publications on weather warnings or reports (in purple, Figure 3), a topic that dominates the publications of the State Civil Defenses of Rio Grande do Sul and Pernambuco (Figure 4).

The dissemination of this type of information is usually recurrent in civil defense agencies, especially in those that do not have professionals to produce the media posts. It is necessary to take care about the type of language used, so that the public can make an adequate interpretation. This is because inadequate messages, such as those related to the communication of warnings, can generate unwanted effects, such as loss of trust in expert systems (Mileti, 1996), disrespect for the social characteristics and cultural practices of the public that receives the messages (Lindell & Perry, 2003), among other aspects.

Of all the pages analyzed in this research period, the State Civil Defense of Minas Gerais brought more publicity of actions before the disaster (in orange), that is, related to prevention.

On the opposite side, in proportion to the volume of information disclosed, the MDR page is the one that most deals with the disaster phase. It also gives more space for response, recovery and reconstruction actions, underlining the existing link with the release of funds and, consequently, accountability.



Figure 4. Examples of posts related to warnings issued by CEDECs at Facebook

Source: Facebook pages (2021)

Note. Left: Post from State Civil Defense of Rio Grande do Sul, which reads "This week there is possibility of temperatures below 0°C in Rio Grande do Sul". Right: Post from State Civil Defense of Pernambuco, which reads "Warning: April 14th, 17:30, the APAC issued a warning of the possibility of moderate/strong rainfalls at the locations of Mata do Sul, Agreste and Sertão. It can also reach the locations of Metropolitan Region of Recife (RMR) and Mata Norte. Our team is on duty, call 199 or the central office at the number (81) 31812490."



Figure 5. Example of publications related to the SEDEC's work

Source: Facebook pages (2021)

Note. Left: post from the MDR, which reads "MDR authorizes transfer of R\$ 1,1 million for Civil Defense actions in Santos (SP)". Right: post from the MDR, which reads "MDR recognizes situation of emergency in municipalities in the states of Rio Grande do Sul and Santa Catarina".

Most of the publications analyzed focused on publicizing the recognition of the Situation of Emergency or State of Public Calamity and on releasing money to act in the response (Figure 5) - which makes it difficult to foster a culture of prevention, in line with the PNPDEC. By recognizing the

problem after it has occurred or releasing money to respond to disasters, the Sedec gives visibility to only one aspect of the civil defense mission, reducing its image to that of first responders, when in fact they are in charge of avoiding emergency situations and to promote DRR actions.

If we remove the publications on the Covid-19 pandemic (which is a health disaster aside), most of the actions disclosed in these six months of analysis focus on the responses, that is, when DRR measures failed or did not exist, and it is only possible to remedy what could previously be avoided.

CONCLUDING REMARKS

In order to reduce the risks of disasters, as foreseen by the PNPDEC (Brasil, 2012), communication oriented towards prevention and self-protection must gain more space within the scope of the Sinpdec. The results of the analysis centered on Facebook pages underline that both at the federal and state levels there is a predominance of response-oriented publications, that is, publications that disclose civil defense actions only after the risk has already become a disaster.

It is also noteworthy the few publications resulting from the recovery phase, which generally require more time and only become news when completed (or inaugurated). How has this recovery been done? What can we communicate about this phase? How is recovery related to others phases? How can we discuss the prevention of new disasters from measures (structural and non-structural) that actually allow for an adaptation and mitigation of risks? These questions can serve as insights for the posts of civil defense agencies to seek new approaches, which can highlight the risks or the period before the outbreak of disasters.

The dissemination spaces of the Sinpdec bodies should not be restricted to the factual, typical of journalistic logic, but broaden their view to prepare citizens to deal with risks, thinking about periodic campaigns and other activities that can generate social mobilization in the face of local challenges. In this context, the role of communication consultants has limits, and it is important to look beyond institutional communication and include elements of risk and disaster communication in its scope.

The publication of weather reports or warnings, although important, lack an educational approach to foster a culture of prevention. In this sense, there is a lack of studies that diagnose how the population has received such messages and how they make use of them.

The systemic perspective, repeatedly pointed out as necessary for disaster risk management, has not yet been incorporated by Sinpdec's communication actions, which present information gaps in periods of no-emergency. There is a difficulty in understanding communication as a permanent process, which strengthens relations between agencies and communities, and it is necessary to integrate communicative strategies in all phases of the risk and disaster management cycle.

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