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International Noise Awareness Day — INAD Brazil 2022

INAD Brasil 2022 focused on childhood!

Abstract: INAD Brazil is the Brazilian branch of the *International Noise Awareness Day* (INAD) campaign, which aims to raise awareness about the impacts of noise on everyday life and public health. Each year, INAD Brazil presents a theme and a motto to highlight the importance of addressing the impacts of noise pollution in our country's daily life and reality. Noise pollution is a global issue that affects humanity and the environment. This article describes the development of the Brazilian campaign for the year 2022. Initially, a brief presentation of INAD and its contextualization over the years with its activities in Brazil is provided, followed by a description of the theme, motto, and development of materials, as well as the activities carried out starting from INAD, which was celebrated on April 27, 2022. There is also a historical record of all the dates on which INAD took place. The text concludes with an announcement of the organization of INAD 2023.

Dia Internacional da Conscientização sobre o Ruído — INAD Brasil 2022

Resumo: O INAD Brasil é o ramo brasileiro da campanha International Noise Awareness Day (INAD), que visa à conscientização sobre os impactos do ruído na vida cotidiana e na saúde da população. Todos os anos o INAD Brasil traz um tema e um lema para a destacar a importância dos cuidados relativos aos impactos do ruído na vida cotidiana e realidade de nosso país. A poluição sonora é um mal que afeta todo o planeta, causando prejuízos à humanidade e ao meio ambiente. Este artigo descreve o desenvolvimento da campanha brasileira referente ao ano de 2022. Inicialmente, há uma breve apresentação do INAD e sua contextualização ao longo dos anos com sua atuação no Brasil, seguida da descrição do tema, lema e desenvolvimento dos materiais, além das atividades realizadas a partir do INAD que foi celebrado em 27 de abril de 2022. Existe também um levantamento histórico de todas a datas em que o INAD aconteceu. O texto finaliza anunciando a organização do INAD 2023.

1. Introduction

International Noise Awareness Day, or simply INAD, was first promoted in 1996 in the United States by what was then known as the League for the Hard of Hearing, now the Center for Hearing and Communication. Since its inception, INAD has aimed to raise public awareness about the effects of noise on health and quality of life. The campaign is held on the **last Wednesday of April each year**.

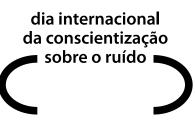


Figure 1: INAD Brazil logo (http://www.inadbrasil.com) — in Portuguese.

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The choice of *Wednesday* is justified as it is a weekday, so that the actions carried out on INAD generate more impact on everyday life. Educational and health activities are conducted in various countries around the world, with the most common being the proposal of **a minute of silence** during business hours, starting at **14:15**, to provide participants with a pause and an opportunity to reflect in silence on the damages of noise in people's lives. Noise pollution is recognized by the World Health Organization (WHO) as a global public health problem, which has led to the expansion of the network of INAD collaborators in many countries around the world. In addition to the United States, the campaign is recognized in Germany¹, Spain, Switzerland, Austria, Portugal, Italy, Chile, Argentina, among others.

Since its first edition in 2008, **INAD in Brazil** has been consolidating, driven by volunteers and non-profit actions [1], see the official logo in Figure 1. The format and activities, initially inspired by campaigns in other countries, have evolved over 15 years, incorporating activities contextualized to the Brazilian reality, considering the country's vast territory and cultural diversity, while maintaining the purpose and unity of the global campaign. The list of publications can be found at https://www.inadbrasil.com/publicacoes-inad-brasil, and everything is also available on Research Gate.

With a national coordination, **INAD Brazil** aims to ensure the unity of the actions in the country with the highest quality, in line with the global campaign, without inhibiting the creativity and identity of participants from all regions. For this, it has a unique visual identity with a logo and annually defined *theme*, *lema*, and standardized materials. The *volunteer group* aims to provide ease by *offering information, graphic and sound materials* so that individuals, entities, and companies throughout Brazil can be vectors of awareness and promotion of related themes. **INAD Brazil** has a website, repositories, and social media for sharing information and communication among coordination, supporters, and participants. **Follow INAD Brazil at**:

Instagram: http://www.instagram.com/inad.brasil
Website: http://www.inadbrasil.com
YouTube: https://www.youtube.com/channel/UCDERY4tK1QNJXDU8MiJK5rA
Facebook: https://facebook.com/inad.brasil
SoundCloud: https://soundcloud.com/inad-brasil
SoundCloud: https://soundcloud.com/inad-brasil
Spotify: https://open.spotify.com/show/6uv1vmUAVExun7Z5VZanoZ
Twitter: https://twitter.com/INADBrasil
GitHub: https://github.com/inadbrasil/inad
Research Gate: https://bit.ly/cap-inad
Email: inadbrasil.org@gmail.com

Nationally, INAD Brazil is supported by universities; scientific, professional, educational, and technical entities; and companies related to the annual theme.

¹In Germany, it is known as "Tag gegen Lärm" (or "Day against Noise") see more at https://www.tag-gegen-laerm.de.

Still affected by the COVID-19 Pandemic of 2020–2022 [2], the campaign, which previously occured in a primarily face-to-face format, adapted to virtual actions, seeking social distancing for health reasons. During the pandemic period, new challenges emerged, prompting different solutions for its continuity. In 2022, the campaign started on April 27 and was able to include some in-person actions, facilitated by the relative safety provided by the mass vaccination of the population. This report discusses the development of the INAD Brazil campaign, from conception to execution, for that 2022 edition.

1.1 After all: the Last Wednesday of April?

In this section, we provide a historical retrospective of all INAD dates — the superscript number corresponds to which week of the month the event occured — starting with the first one in 1996 and concludes in the future, precisely in 2027, when we will celebrate the twentieth INAD Brazil. Historically, it has been held on the second, third, fourth, and occasionally, the fifth Wednesday of April. However, since 2009, the day has been celebrated on the last Wednesday of April (which usually occurs on the fourth or fifth Wednesday).

Over the course of INAD's journey, there have been some years with five *Wednesdays* in April. These years were 1997, 1998, 2003, 2008, 2009, 2014, 2015, and 2020 (with future five-Wednesday-Aprils to be in 2025 and 2026). In some of these years, INAD was celebrated on the last Wednesday (the fifth in these cases), differing from the traditional *fourth Wednesday* as it usually happens. Let's review all the INAD dates from the beginning:

- 1996: April 24⁴ (first INAD)
- 1997: April 30⁵
- 1998: April 29⁵
- 1999: April 21³
- 2000: April 12² (fifth INAD)
- 2001: April 25⁴
- 2002: April 24⁴
- 2003: April 30⁵
- 2004: April 28⁴
- 2005: April 20³ (tenth INAD)
- 2006: April 26⁴
- 2007: April 25⁴

INAD Brazil was established in 2008.

- 2008: April 16³ (first INAD Brazil)
- 2009: April 29⁵
- 2010: April 28⁴

- 2011: April 27⁴
- 2012: April 25⁴
- 2013: April 24⁴
- 2014: April 30⁵
- 2015: April 29⁵ (twentieth INAD)
- 2016: April 27⁴
- 2017: April 26⁴ (tenth INAD Brazil)
- 2018: April 25⁴
- 2019: April 24⁴
- 2020: April 29⁵
- 2021: April 28⁴
- 2022: April 27⁴
- 2023: April 26⁴
- 2024: April 24⁴
- 2025: April 30⁵ (30 years of INAD)
- 2026: April 29⁵
- 2027: April 28⁴ (20 years of **INAD Brazil**)

These dates have been confirmed by the Center for Hearing and Communication in the USA. However, it is also worth reminding the reader that around the world there are countries that have adjusted the day to a different date due to their internal needs (for example, to avoid conflict with another important date).

All INAD Brazil posters (since 2008) are available on the website (https://www.inadbrasil.com/ materiais-inad-brasil/) or on GitHub repository at https://bit.ly/inad-github-poster.

1.2 The Pandemic Context in Brazil in 2022

At the beginning of 2022, the pandemic situation in Brazil had alleviated compared to the previous two years, but its impacts could still be felt across all sectors.

The healthcare sector was experiencing an overload from the Brazilian Healthcare System, representing significant challenges for the management of resources, equipment, supplies etc., as well as impacting the mental health of its professionals. Concurrently, while the vaccination campaign was progressing, it met with population hesitancy and unequal distribution of doses. Another issue that the healthcare sector in Brazil needed to address at the time was its attention to non-Covid cases, which had a backlog of demand and had seen their resources allocated to combatting Covid-19.

Beyond the direct consequences of Covid-19 on public health, the pandemic significantly shaped the social and economic landscape, affecting the support infrastructure for health, living and working conditions, as well as mental health status, access to essential goods, and the economic sustainability of the entire community.

In Education, the interruption of face-to-face teaching and the transition to remote learning presented challenges for students, families, teachers, and educational institutions. This led to educational inequalities, school dropouts, learning losses, mental health issues and the well-being of teachers and students. With the gradual resumption of in-person classes in 2022, other challenges arose: adaptation to safety protocols, recovery of learning, and emotional support for students.

By April 2022, during which the International Noise Awareness Day (INAD) is celebrated, Brazil was experiencing a relatively stable situation, with the moving averages of Covid-19 cases and deaths showing a decline since the beginning of February. The Carnival holiday this year was from 02/26 to 03/01, and although many Brazilian cities known for their carnival festivities, such as Recife, Olinda, Salvador, Rio de Janeiro, and São Paulo, had canceled events, there were still smaller, private celebrations and parades on a smaller scale. Despite the gatherings recorded during the carnival and the lifting of mask mandates in many states, there was no significant reversal of this trend.

This fact was related to the vaccination coverage at the time, placing Brazil as the 12th ranked country in the world with the best Covid-19 vaccination coverage, with about 81.8% of the population having received at least one dose, 73.9% fully vaccinated, and 32.9% having received the first booster dose. In addition, vaccinating Brazil's population aged 5 to 11 years had just begun.

In this context, with five days remaining until International Noise Awareness Day on April 22, 2022, through the Ministry of Health the Federal Government declared the end of the Public Health Emergency of National Importance caused by the Covid-19 Pandemic, considering the response capacity of the Unified Health System (SUS), the improved epidemiological scenario, and the advancement of the vaccination campaign against Covid-19 at that time.

This context was crucial so that the National Coordination of INAD Brazil would be able to guide the resumption of some in-person activities, safeguarded by safety and health recommendations for the population.

2. Childhood: the 2022 Campaign (Concept, Theme, and Motto)

Every year, INAD Brazil introduces a theme and a motto to highlight the importance of addressing the impacts of noise pollution in our country's daily life and reality. Noise pollution is a global problem that harms humanity and the environment [3]. The adverse effects of noise on human health and quality of life are detectable at all ages, from the gestational period through childhood and adolescence, culminating in adult life and old age.

For the baby, exposure to noise by the mother during pregnancy can lead to birth defects, as well as pose a risk to hearing. Upon birth, the hospital environment already presents harmful sound sources for the newborn, such as noise from incubators, routines, and hospital equipment. Throughout child development, in addition to noise sources that affect people of all ages, those related to sound toys, musical and sporting events, indoor amusement parks, and other entertainment venues, the use of personal stereos [4], and those generated in the school environment stand out.

The effects of exposure to intense sounds can pose risks to physical, mental, and social health, and impair communication, learning, and school performance in children. Furthermore, as these effects are cumulative, they can lead to greater susceptibility to other health problems later in life.

When we think of childhood, we are reminded of joy, innocence, care, protection, and lots of fun! There is no room for risks to children's health, development, or life. Therefore, the theme of the **2022 campaign** was designed to highlight the risks of noise in childhood, with the aim of protecting health at this stage of life. The proposed motto was:

• "In childhood, fun and protection. No noise!".

Based on the theme and motto, the INAD Brazil 2022 campaign aimed to draw attention to the impacts of noise in children's lives, which can compromise their development, learning, social interaction, and health.



Figure 2: INAD Brazil 2022 motto together with ambassadors Sofia and Otto.

Protecting health is essential, regardless of one's stage of life. Considering that hearing is such a delicate asset and part of health, in line with related propositions, INAD Brazil also echoed the theme of World Hearing Day (https://www.who.int/campaigns/world-hearing-day/2022) proposed by the World Health Organization (WHO) in March 2022: "*To hear for life, listen with care!*". This theme intensifies visibility to the new international standard for safe listening in places and events where amplified music is used, published by the WHO in the same year — more can be seen at https://www.who.int/news/ item/02-03-2022-who-releases-new-standard-to-tackle-rising-threat-of-hearing-loss [5].

3. Ambassadors of INAD Brazil 2022

To raise awareness among all audiences, especially children, INAD Brazil 2022 was supported by ambassadors, the characters **Sofia and Otto, created by the Rio Grande do Sul state (in Brazil) cartoonist Pedro Leite**.

Pedro Leite is a national reference as a cartoonist, illustrator, and award-winning advertiser, winning Best Fanzine (Angelo Agostini Trophy) in 2013 and Best Web Comic (HQ Mix Trophy) in 2016. He granted the sponsorship of his characters Sofia and Otto to the cause of INAD Brazil for the year 2022 — learn more at @PedroLeiteok and @sofiaeotto [6].

Sofia and Otto, created in 2017, have been published in a series of children's books and comics that depict a family addressing everyday topics in a critical, engaged, and fun way, under the authorship of Pedro Leite. The author highlights that each family member expresses their personality in a non-conventional way, reflecting on various themes. Sofia and Otto have touched on themes such as friendship, maturation, diversity, games, the pandemic, and many others that show how tuned-in and engaged they are. Widely known in books used in schools in Rio Grande do Sul state and with thousands of followers on social media (@sofiaeotto), Sofia and Otto were deemed pertinent to support the purposes of raising awareness about noise in childhood — including Pedro's updates in arts especially for INAD, with the theme of "sound". Learn more about Sofia and Otto at https: //www.sofiaeotto.com.br.

4. Materials Released

In 2022, the following materials were made available:

- Main campaign poster (A3 and A4 formats);
- Poster with sound levels (A3 and A4 formats);
- Timeless "Keep Calm" style poster (A3 and A4 formats);
- Banner featuring the main artwork of the campaign (A0 format);
- Campaign postcard (10 cm \times 15 cm format);
- Campaign-themed presentation template (PPTX format);
- Graphic elements in PNG format; and
- Audio spot (available on Spotify and SoundCloud).

All materials are available on the official website or the 2022 GitHub repository. Refer to Figure 3 for an overview of the artworks, as well as the posters at the end of this insert (in A4 format).

5. National Supporters of the 2022 Campaign

In Brazil, INAD has been taking place since 2008 with increasing participation from independent and institutional collaborators, sympathizers, and class-representative organizations that conduct various activities to mobilize the population for the cause. Since the first edition, we have had institutional



(a) Main poster.

(b) Poster with sound levels.



(c) Keep Calm poster.

Figure 3: INAD Brasil 2022 campaign posters.

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support from universities and professional, technical, and scientific entities. Over the years, notable supporters include the Brazilian Society of Acoustics (Sobrac), Brazilian Academy of Audiology (ABA), Federal Council of Speech Therapy (CFFa), Brazilian Society of Speech Therapy (SBFa), Dangerous Decibels Brazil (DDB), and *Good Decibels*. The support from these professional bodies has been deemed essential, as it ensures the execution and dissemination of actions resulting from the direct involvement of institutions and professionals from all regions of Brazil who work in combating noise pollution and caring for the overall health of the affected population, in various areas and settings.

Given the focus of the 2022 campaign on the child audience and the multidisciplinary efforts required for the cause, the group of institutional supporters also included the Interamerican Association of Pediatric Otorhinolaryngology (IAPO Brazil) and the Brazilian Academy of Pediatric Otorhinolaryngology (ABOP).

6. Challenges and Strategies for the 2022 Campaign

Throughout the pandemic period, including the year 2022, the National Coordination was always aware of health priorities, as well as the importance of all societal segments adopting responsible measures to protect the population, to contain the spread of SARS-CoV-2, and to prevent injuries caused by it. As a result, this situation prompted changes in the strategies of INAD Brazil over the 2020–2022 triennium. Its overarching goal was always the health and well-being of the community. Therefore, INAD was engaged in the battle against the novel coronavirus, while still fulfilling its mission to raise awareness about the impact of noise in everyday life.

The year 2022 was considered atypical for INAD Brazil, still due to the conditions imposed by the pandemic, as previously described in this insert. However, with the declaration of the end of the Public Health Emergency of National Importance caused by Covid-19 just before INAD, coupled with the status of vaccination coverage at the time, the National Coordination drafted guidelines for the cautious resumption of in-person activities and encouraged actions that did not pose health risks to the population.

Proposed by the World Health Organization (WHO), World Hearing Day is celebrated annually on March 3rd, with a specific theme. This date aims to promote ear and hearing care worldwide. In 2022, the theme was "*To hear for life, listen with care!*", enhancing visibility upon the new international standard for safe listening at venues and events where amplified music is played, then recently published by the WHO. Considering the importance of hearing as an essential component of health and the need to care for it, INAD Brazil in 2022 aligned with the proposals of World Hearing Day. This alignment reinforced INAD Brazil's commitment to amplifying initiatives related to World Hearing Day's theme, which was in perfect harmony with its own guidelines.

In also resuming presencial scientific events, the 37th International Meeting of Audiology, hosted by the Brazilian Academy of Audiology (ABA), took place in São Paulo (SP) from April 6th to 8th, 2022. Since 2010, INAD Brazil has had the support of ABA as an institutional partner, which provides a stand in the exhibitor area to promote the campaign's purposes, establish partnerships, and engage participants. As the event brings together professionals and students from all regions of Brazil and neighboring countries, the visibility gained is immense. It is one of the largest events in Speech-Language Pathology, which explains the predominance of speech therapists participating in INAD Brazil.

As there was a gradual resumption of in-person activities, on the other hand, there were still many problems related to the pandemic in various directions. Thus, the National Coordination continued to encourage virtual activities, as they contributed to participant protection and allowed for greater reach. For this, the campaign's artworks remained geared towards the internet and social media.

Regarding campaign materials, PNG files with transparent backgrounds were made available on the website and the GitHub repository to be used as frames for profile pictures and other creations for social networks. The artworks were compatible for use in Canva, Photoshop, Corel Draw, Illustrator, and Paint. The graphic elements of the campaign were also available separately so that they could be adapted in a custom composition, according to the reality of each locality.

7. Reach and Engagement

As instated in the 2020 and 2021 campaigns, the 2022 campaign also included an analysis of engagement via social media, particularly on Instagram. Since the campaign is open to any participant, an exact tally is nearly impossible. However, we can provide some data observed on the INAD Brasil profile: the posts received a total of 416 likes, 540 shares, and reached 8,317 users. Regarding the visitor profile, 71.20% were women and 28.70% were men. Their predominant age groups were between 25 and 34 years old (36.40% of the profiles) and between 35 and 44 years old (30.80% of the profiles).

Especially in 2022, with the return of in-person activities post-pandemic, actions in schools, universities, and public spaces were also resumed. In order to estimate the number of actions across the country, a survey of publications related to INAD was conducted via direct or indirect tags on the INAD Brasil Instagram (tags on the profile @inad.brasil or hashtags, not considering stories). The publications were counted and organized according to the state of origin, as shown in Figure 4, where a higher number of posts can be observed in the states of Santa Catarina, Rio Grande do Norte, and São Paulo (followed by Minas Gerais, *uai*).

Finally, it is important to note that the survey only considered posts that made direct or indirect mention of INAD through tagging or hashtags. Therefore, it is possible that many other activities were conducted across the country and not counted due to lack of posts or tags.

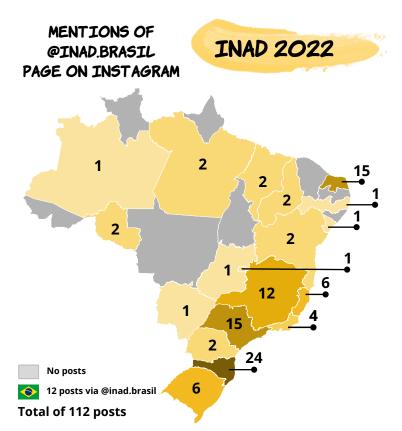


Figure 4: Direct and indirect mentions of INAD Brasil on Instagram by state of origin [2].

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8. Planning for 2023

In 2023, INAD Brazil would celebrate 16 years of activity, which is a cause for celebration of many achievements. However, given the uncertainties imposed by the pandemic at the end of 2022, it was crucial that action planning for INAD Brazil 2023 be flexible, adaptable, and sensitive to the context. Thus, the campaign's planning was prepared to handle possible changes in health restrictions and guidelines.

Accordingly, hybrid strategies were considered, combining in-person and virtual events, allowing for audience reach even in restrictive scenarios. To this end, the creation of digital materials and content and the establishment of institutional partnerships will be maintained. The coordination of INAD Brazil commits to continue monitoring the pandemic situation, which will allow for quick adjustments if necessary. In return, it relies on the individual responsibility of each person to strengthen efforts to raise awareness about noise. INAD 2023 will take place on April 26th. Participate!

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April 27, 2022

On April 27, 2022, International Noise Awareness Day will be celebrated. There will be 60 seconds of silence between 2:15 PM and 2:16 PM to highlight the impact of excessive noise in our lives.

Follow the program on the website www.inadbrasil.com & 🙆 /inad.brasil

VegNutri



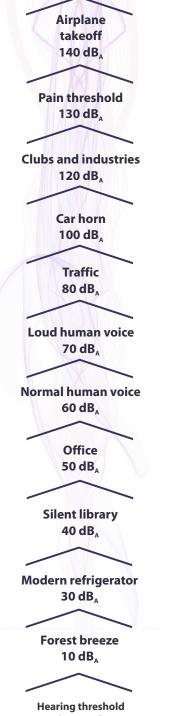
Gold support and sponsorship







April 27, 2022 International Noise Awareness Day



Sound Pressure Levels at 1 m distance



IN CHILDHOOD, FUN AND PROTECTION. NO NOISE!

PEDRO LEITE

pupil dilation and

headache

increased heart rate

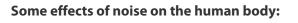
stomach and esophagus

contraction

muscle reaction

Stay tuned!

Excessive sound exposure not only affects your hearing but also your entire body!



increased production of

adrenaline and corticotrophin

ringing in the ears and insomnia

increased thyroid

hormone production

contraction of blood vessels



KEEP CALM AND enjoy life



inadbrasil.com

INAD BRASIL ART BY WILL D'ANDREA | SOFIA OTTO BY PEDRO LEIT