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The processing of personal data in the battle against COVID-19: Scopes and limits of the experiences of Brazil and the European Union

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Abstract

This article investigates personal data processing by the Brazilian government and the European Union's central government in the battle against COVID-19. The study conducted an overview of the laws on data protection during the COVID-19 pandemic, mapped the measures that the Brazilian government and the European Union's central government adopted on personal data processing to combat COVID-19, and investigated whether these measures contributed to managing the COVID-19 crisis. This qualitative and exploratory research presents a collective case study and carries out documentary analysis based on the legislation, using triangulation of data sources. The findings show that the governments used personal data processing to foster the policy cycle, obtain accurate diagnoses to design policies supported by real data, and assess the situation to quickly mitigate unwanted effects. This data processing was based on applications and geolocation mechanisms. In Brazil, the study observed the case of the apps "Coronavirus - SUS" at the national level and "SIMI - SP" at the state level (in the state of São Paulo). In Europe, the case of the app Corona-Datenspende was analyzed. The results also suggested that personal data processing in Brazil occurred legally but presented security issues. In Europe, the process was based on citizens' consent and offered them privacy and security. Thus, personal data processing is a topic especially relevant during the COVID-19 pandemic and must be analyzed considering how attempts to promote the right to health can affect data protection rights.

KEYWORDS: Sensitive personal data. Brazilian General Law of Data Protection. General Data Protection Regulation. Use of personal data by governments. Battle against COVID-19.

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O uso de dados pessoais no combate à COVID-19: alcances e limites das experiências do Brasil e da União Europeia

Resumo

Este artigo investiga como dados pessoais estão sendo tratados pelo governo brasileiro e pelo governo central da União Europeia no combate à COVID-19. Para isso, apresenta-se um panorama da legislação de referência dos governos sobre proteção de dados durante a pandemia da COVID-19; mapeiam-se as medidas do governo brasileiro e do governo central da União Europeia no combate à COVID-19 que envolvem dados pessoais e investiga-se se essas medidas contribuem para o gerenciamento da crise da COVID-19. A metodologia é qualitativa exploratória, dados o contexto e o enfoque no combate à COVID-19. Além disso, realizou-se um estudo de caso coletivo, incluindo uma análise documental da legislação de referência, valendo-se, ainda, da triangulação de fontes de dados. Como resultado, entende-se que o tratamento de dados pessoais por governos ocorre, nesse caso, para fomentar o ciclo de políticas públicas e permitir um diagnóstico preciso, um desenho da política baseado no conhecimento da realidade e uma avaliação com rapidez para mitigar os efeitos indesejados. Esse tratamento de dados ocorreu por meio de aplicativos e mecanismos de geolocalização, sendo, no Brasil, o Coronavírus - SUS em âmbito nacional e o SIMI - SP, estadual, enquanto, na Europa, o caso escolhido foi o Corona-Datenspende. Além disso, o tratamento de dados aconteceu, no Brasil, de forma legal, porém, com lacunas em termos de segurança. Já na Europa, o tratamento de dados ocorreu de modo a respeitar o consentimento dos cidadãos e oferecer privacidade e segurança a eles. Assim, concluiu-se que o tratamento de dados pessoais foi especialmente relevante durante a pandemia da COVID-19, mas é necessário analisar como a tentativa de promover o direito à saúde pode afetar o direito à proteção de dados.

PALAVRAS-CHAVE: Dados pessoais sensíveis. Lei Geral de Proteção de Dados. General Data Protection Regulation. Uso de dados pessoais por governos. Combate à COVID-19.

El uso de datos personales en la batalla contra la COVID-19: Alcances y límites de las experiencias de Brasil y la Unión Europea

Resumen

Este artículo investiga cómo los datos personales están siendo procesados por el Gobierno brasileño y el Gobierno central de la Unión Europea para combatir la COVID-19. Para ello, se presentó un panorama de la legislación de referencia de los gobiernos sobre la protección de datos durante la pandemia de COVID-19; se mapearon medidas del Gobierno brasileño y del Gobierno central de la Unión Europea para combatir la COVID-19 que involucran datos personales; y se investigó si estas medidas contribuyen a la gestión de la crisis de la COVID-19. La metodología es cualitativa y exploratoria, dado el contexto y el enfoque en el combate a la COVID-19. Además, se realizó un estudio de caso colectivo, que incluyó un análisis documental de la legislación de referencia, utilizando triangulación de fuentes de datos. Como resultado, se entiende que el procesamiento de datos personales por parte de los gobiernos ocurre para impulsar el ciclo de políticas públicas y permitir un diagnóstico certero, un diseño de políticas basado en la realidad y una evaluación rápida para mitigar los efectos no deseados. Este procesamiento de datos se basó en aplicaciones y mecanismos de geolocalización. En Brasil, las herramientas utilizadas fueron la aplicación Coronavirus - SUS -a nivel nacional- y el Sistema de Monitoreo Inteligente (SIMI-SP) -a nivel estatal-, y en Europa se utilizó la aplicación Corona-Datenspende. Asimismo, el procesamiento de datos ocurrió, en Brasil, de forma legal, pero con brechas en términos de seguridad, mientras que en Europa se respetó el consentimiento de los ciudadanos, ofreciéndoles privacidad y seguridad. Así, se concluye que el tratamiento de datos personales es especialmente relevante durante la pandemia de COVID-19, pero es necesario analizar cómo el intento de promover el derecho a la salud puede afectar el derecho a la protección de datos.

PALABRAS CLAVE: Datos personales sensibles. Ley General de Protección de Datos de Brasil. Reglamento General de Protección de Datos. Uso de datos personales por los gobiernos. Batalla contra la COVID-19.

INTRODUCTION

The global scenario in 2020 was unprecedented. The worldwide measures put forward by health authorities to fight the COVID-19 pandemic involved adaptations and arrangements that caused profound social and economic consequences. In this context, data and information supporting decision-making must be correctly collected and made available without violating fundamental ethical precepts. The debate on data and individual information encompasses a reflection on privacy rights to protect the right to life, considering the rule of proportionality (SILVA, 2011).

This study was carried out during the COVID-19 pandemic, a moment when the legal framework is oriented to fight this issue. The analyzed governments have adopted social distancing measures to defend the right to health, reducing daily infections and flattening the contagion curve (GARCIA and DUARTE, 2020). Also, authorities have worked to process citizens' personal data to map the development of the cases in each locality. Although health is a fundamental right, the principle of reserve for contingencies – limitation of state capacities conditioned by the availability of resources (KRELL, 2002) – has to be applied to understand state actions to provide public healthcare. This principle must be considered when reflecting on using citizens' personal data to prevent the collapse of the public health system, and mitigate the COVID-19 pandemic taking into account the relevance of data to improve the policy cycle (JANUZZI, 2009).

This research is oriented by the question: how are personal data being used by the Brazilian government and the European Union (EU) central government in the fight against the COVID-19 pandemic? It is important to stress that the General Data Protection Regulation (GDPR) – the data protection legislation in force in the EU – was a paradigm for the elaboration of the Brazilian General Data Protection Law (*Lei Geral de Proteção de Dados* – LGPD) (PEDRASSANI and BREDA, 2020) currently in force.

The article's main objective is to investigate how the Brazilian and the EU central governments use citizens' personal data in the fight against COVID-19. The specific objectives are a) to present an overview of the legislation that guides governments concerning data protection during the COVID-19 pandemic, to map the measures of the Brazilian government and the EU central government to combat COVID-19 involving personal data, and b) to investigate whether personal data processing and the supporting legislation contribute to fighting the new coronavirus crisis.

Thus, this article's conception and publication meet the need to interpret the measures taken by both governments considering the legal frameworks. It is a situational mapping of the measures applied and rules to be followed for an assertive view of the problem. Furthermore, this discussion recognizes that policies require data and points out that there are limitations when it comes to data processing. In this context, laws direct public management to protect citizens and the democratic state under the rule of law. This is particularly relevant in a context in which using apps to collect health data may not provide security for users. Individual rights cannot be overlooked in policy making and/or when seeking to protect the right to health. There are ways to reconcile the processing of personal data to design and deliver healthcare, privacy and data protection. The article discusses the state's commitments to citizens and what kind of data processing is acceptable for the state to meet this commitment.

THEORETICAL FRAMEWORK

The COVID-19 pandemic gained prominence in public health since its clinical picture can vary from asymptomatic infections to severe respiratory conditions leading to death and the disease can be transmitted by either symptomatic or asymptomatic people (NOGUEIRA and SILVA, 2020). Therefore, the recommendation is to quarantine in case of contamination and when the person has contact with someone who has just been diagnosed as infected.

In this context, the state action is focused on prevention, using personal data to map and inform if citizens are likely to be in contact with an infected person (CORRÊA, PAULA, and BELLINTANI, 2020). These actions are justified from a public health perspective, as they speed up the entry of potentially infected people into quarantine.

Why governments use data

In the policy cycle, personal data is an input to inform the state about the dimensions of certain situations, mainly in the stages of agenda-setting/diagnosis, policy formulation, and evaluation. In situational diagnoses, social indicators are built based on data collected from the population, instrumentalizing the interests around public actions by making the social reality more objective, simple, and standardized (JANUZZI, 2009). In this way, a diagnosis helps public managers increase their understanding of the cause of the problem. It favors the development of strategies to address the issues and cease their effects – even if not dealing with these effects directly.

In the policy formulation stage, data support a preliminary feasibility assessment grounded on the crossing of information that originated the problem mapping and delimitation (stage of diagnosis). Finally, in the policy evaluation stage, data are used to revisit the problem, comparing social indicators before and after implementation, as well as the influence of risk factors and risks per se. In addition, the data refer to indicators monitoring government activities, recording the actions taken, and measuring the policy efforts and effects (JANUZZI, 2009).

Thus, governments use citizens' personal data to guide interventions to fight COVID-19. These interventions are urgent in the face of the rapid spread of the disease, and data must be available and frequently updated, supporting timely governmental decision-making processes. In this sense, finding and fighting transmission outbreaks and keeping hospital supplies are governmental tasks favored when adequately processing citizens' personal data.

However, for Pendão (2012, our translation), it is essential "to consider the privacy issues raised by this type of data collection strategy and observe its impact on the use of the application. It is necessary to integrate the mechanisms that guarantee the users' privacy and security." Therefore, privacy does not always imply security and vice versa.

The rule of proportionality

The rule of proportionality defines whether an action should be carried out based on three analyses, necessarily in this order: analysis of suitability, necessity, and proportionality in a narrow sense. There is no implication that the three sub-rules should be analyzed: they are subsidiarily related. Before the adequacy analysis, the legitimacy of the intended purposes must be analyzed (SILVA, 2011).

The analysis of suitability defines whether a measure is adequate, observing whether the objective would be achieved or promoted with the action. Second, the analysis of necessity observes whether the goal can be achieved, with equal effectiveness, by other ways that limit, to a lesser extent, the violated fundamental right in the case of a comparative examination. Third, the analysis of proportionality in a narrow sense refers to balancing the intensity of the restriction to the fundamental right that may be violated, such as the importance of protecting the fundamental right that conflicts with the object of analysis and that supports the adoption of a restrictive measure (SILVA, 2011).

Furthermore, the case studied refers to a situation in which the public interest is the right to health, and the right to privacy and data protection represents the individual's interest. Since the COVID-19 crisis can be mediated by processing personal data, it appears that this is a situation in which one of them may be harmed. Thus, the analysis must consider the risks and guarantees arising from abdicating one right in favor of another.

Overview of the legal framework

The legal framework supporting privacy and data protection in Brazil is formed by the Constitution of the Federative Republic of Brazil, the Civil Rights Framework for the Internet (*Marco Civil da Internet* – MCI), the Civil Code (CC), and the Consumer Protection Code (*Código de Defesa do Consumidor* – CDC), and, more specifically, the Brazilian General Data Protection Law (*Lei Geral de Proteção de Dados* – LGPD) and the General Data Protection Regulation (GDPR) in the EU. As for the specific data protection laws – LGPD and GDPR – both provide that the user must be clearly informed of how personal data are collected, used, consulted, or stored for any processing. Users have to be informed of the extent of use and the risks, rights, rules, and guarantees involved, according to explicit and legitimate purposes.

The GDPR prohibits the processing of personal health data "except for situations such as public interest in the field of public health, further providing that the Union or the Member States must establish appropriate and specific measures, safeguarding users' rights and freedom" (UNIÃO EUROPEIA, 2016, our translation). Therefore, the introduction of technology in the fight against COVID-19 in Europe occurs through actions structured in the least harmful and invasive way and most beneficial to its citizens, given the tradition of protecting privacy (FINKELSTEIN, FEDERIGHI, and CHOW, 2020).

In the Brazilian LGPD, governments may handle the citizens' personal health data only "when the holder or their legal guardian consents, in a specific and prominent way for specific purposes" (BRASIL, 2018, art. 11, I, our translation), or "without the subject's consent" (BRASIL, 2018, art. 11,

II, our translation), when indispensable, among other justifications, for the "shared processing of data necessary for the execution, by the public administration, of public policies provided for in laws or regulations" (BRASIL, 2018, art. 11, II, b, our translation).

Brazil counts on other laws that guarantee civil liability in privacy and data protection violation cases, which are part of the data protection tradition that existed before the LGPD (FGV, 2020). According to Krieger (2019), Brazil starts to discuss data protection with art. 5 of the constitution, which reads: "The people's intimacy, private life, honor, and image are inviolable, ensuring the right to compensation for material or moral damages resulting from these violation" (BRASIL, 1988, art. 5, X).

Article 3 of the MCI provides that Internet use in Brazil must follow, among others, the principle of "personal data protection as provided in law" (BRASIL, 2014, art. 3, III, our translation). Article 7 establishes that the user has the right not to provide personal data, "except with free, express and informed consent or in cases provided for by law" (BRASIL, 2014, art. 7, VII, our translation). Therefore, the MCI provides rights based on informational control and self-determination, in addition to presenting principles such as purpose, pertinence, and non-abusive use (TEFFÉ and MORAES, 2017).

The Civil Code is analyzed to understand how the state regulates civil liability in the event of privacy violation (by state or private agents that have a relationship not mediated by consumption with the data subject) and provides on moral damages and the need for reparation regardless of intent. As for the CDC, the consumer code is based on "legitimate expectations of security," which is an indeterminate legal concept, leaving the courts to analyze case by case, already foreseeing cases of judicialization (BIONI and DIAS, 2020).

Therefore, among the pieces of legislation available, the LGPD offers greater informational self-control, equality, and citizenship, protects individuals from unreasonable discrimination, and maintains the right to freedom, facilitating the lawful, fair, and transparent use of personal data (FGV, 2020).

Also, Doneda (2020) points out that a normative framework for data protection offers security and legal certainty when processing such data in emergencies. Since data protection is geared toward citizens' protection, some provisions legitimize personal data processing to benefit the public interest. Thus, data protection legislation offers legal certainty regarding the provision and processing of personal information for an emergency such as the COVID-19 pandemic.

Despite this, in the EU, it is explicit that "a service provider cannot prevent data subjects from accessing a service on the basis that they do not consent" (EUROPEAN DATA PROTECTION BOARD, 2020). On the other hand, this parameter finds flexibility in Brazil: in some cases, the fact that the subject used a particular service is understood as consent to process personal data.

METHODOLOGICAL PROCEDURE

This exploratory research addresses the fight against the COVID-19 pandemic through personal data processing. The study was conducted amid the pandemic and in the first years of the Brazilian LGPD (enacted in 2018), comparing it with its counterpart, the GDPR, already in force in the European Union for some years. In addition, a collective case study was carried out, whose objects were the Brazilian government and the EU central government due to their different ways of handling the health crisis and the unequal scenarios and developments.

Documentary analysis was conducted on health reports prepared by the Robert Koch Institut (RKI) and on the legislation mentioned before (constitution, civil code, civil rights framework of the Internet, consumer protection code, LGPD, GDPR). This method was used to compare the legislation of each case with the information extracted from health reports, offering an analysis based on individual rights and data – which play an indispensable role in public health today.

Data triangulation was used to connect investigation, legislation, judicial decisions, articles, news, health reports, and webinars, providing a multifaceted view of the method of knowledge construction by confronting different perspectives and building a critical view closer to reality. The phenomenon was studied a) based on periods, from the entry of personal data protection on the public agenda to how the legal framework was progressively built to address the issue; b) based on spaces, addressing both the elements available in Brazil and the way the problem was addressed in the EU; c) using "researchers with different theoretical backgrounds and areas of knowledge to analyze the same problem" (GUION, 2002 apud AZEVEDO et al., 2013, p. 5, our translation), pointing out that the focus of the documents varied, encompassing legal documents and public administration, health, and journalistic texts.

RESULTS AND ANALYSIS

The findings refer to why governments use personal data in the fight against COVID-19, presenting the measures adopted and how such measures followed the legislation. The instrumentalization of personal data and its relationship with individual guarantees are discussed. In addition, the discussion addresses a step before the actions to be implemented per se, addressing whether any public policy considered is consistent with the democratic state under the rule of law, which means ensuring personal data protection by focusing on what is allowed by law and safe for the citizen. The relationship between individual and collective rights is established as individual rights favor privacy. Therefore, the restriction of access to personal data and collective rights keeps privacy and data protection in the background so that the government can, through handling data, measure the COVID-19 crisis and fight it. Thus, these rights collide at the beginning, but there are features, such as anonymization and obtaining consent, that allow both rights to be respected.

Legal framework

Regarding the LGPD and GDPR, the following principles present, respectively, in article 6 of Law 13709/2018 and in article 5 of Regulation (EU) 2016/279:

BOX 1
Principles of LGPD and GDPR

LGPD (Brazil)	GDPR (UE)
Suitability	Lawfulness, loyalty, and transparency
Necessity	Purpose suitability and limitation
Transparency	Necessity or minimization
Free access	Data quality or accuracy
Data quality	Conservation limitation
Security	Security, integrity, and confidentiality
Prevention	Accountability
Accountability	_
Non-discrimination	-
Purpose	_

Source: art. 6, Law 13709/2018 and art. 5 of the EU regulation 2016/279.

The legal bases for processing health data in the context of COVID-19, in the LGPD and the GDPR, are the provision of statistical information and the public interest. This allows collecting, processing, and maintaining data, regardless of the subject's consent, provided that, according to safeguards, its use is proportionate to achieve the purposes and specificities according to the needs and responsibilities of each authorized agency. Therefore, these agencies could gather elements to deal with the pandemic through public policies and designed systems (ALMEIDA et al., 2020).

Measures adopted and their compliance with legislation

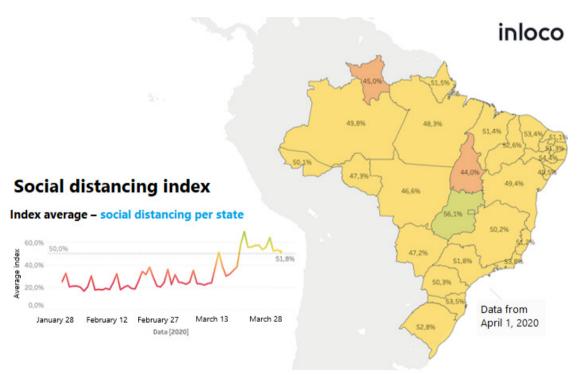
The measures involving the use of citizens' data are technological and statistical mechanisms aimed at elaborating social indicators to support governmental action. The legal framework is a backdrop and a tool to combat the crisis.

Measures adopted in Brazil

In Brazil, the geolocation system InLoco provides, daily, the state and national average social distancing index (Figure 1). The system also presents the number of people who visited health centers, clinics, and hospitals, without linking geolocation and user so that the use of information through applications is consensual. The public authorities received anonymized data from the previous day to avoid retaliations for non-compliance with social distancing measures (SCHREIBER, 2020). Therefore, by providing consent and anonymization, the system respects the legislation and helps the government to process data, carry out the policy cycle and optimize the response time to changes.

FIGURE 1

The InLoco System presents the social distancing index – national and per state



Source: Braga (2020).

The state of São Paulo also uses the Intelligent Monitoring System of the Government of the State of São Paulo (SIMI - SP). The system obtains data in partnership with telephone operators and cross-references them with health records to measure social distancing. With this information, the government sends alerts (text messages and other means) and identifies places where people are likely to agglomerate, using this information to raise awareness among the citizens. The system offers the state an updated overview for situational mapping of the contagion in the territory. In addition, collective data is monitored based on groups starting from 30,000 users (therefore, municipalities with a lower number of inhabitants are not published in the system) (GOVERNO DO ESTADO DE SÃO PAULO, 2020).

Figure 2 presents the SIMI-SP and the map of the State of São Paulo, highlighting the monitored municipalities and their degree of social distancing.

FIGURE 2
SIMI-SP and the Map of the Social Distancing Index in July 16, 2020



Source: Governo do Estado de São Paulo (2020), updated on July 19, 2020, 3.32 p.m.

However, there is a lack of transparency about the extent of data processing beyond the purpose of presenting trends in displacement and the effectiveness of social distancing measures (PORTELLA and SILVEIRA, 2020). Therefore, although SIMI – SP observes the legislation, the system must improve to detail the extent of data processing.

It is noteworthy that data at more detailed geographic levels than municipalities are not published systematically, not even for large cities. In this context, it is worth discussing the effectiveness of using these data since they cannot support intra-municipal actions (ALMEIDA and FRANCISCO, 2020). In this sense, the regulation of a national geographic policy, legitimate latent interest for the promotion of public policies, continues to be considered (PEIXOTO et al., 2020; MEDEIROS et al., 2017), involving other national concerns, such as the extension of the citizenship (FRANCISCO, ALMEIDA, and PEREIRA, 2016) and the monitoring of deforestation in the Brazilian Amazon (UGEDA, 2020).

The Coronavirus – SUS app addresses prevention, identification of symptoms, and treatment, allows citizens to check fake news and indicates the nearest health services (SECRETARIA DE ESTADO DA SAÚDE DE SÃO PAULO, 2020) using geolocation. Initially, the app did not have a privacy policy, so consent was considered given with the use of the app. Permissions and unnecessary data for the operation were also collected, and unencrypted data were transferred to the Dynatrace company (GOMES et al., 2020). The app had the permissions on the Play Store or Apple Store, so there is consent under the law, but it is not a safe app.

Also, in July 2020, the app started using contact tracing technology, created through a partnership between Google and Apple. This implies that, with the function activated by the user's choice, cell phones receive information from cell phones that also have this function activated, as well as send it through anonymous BlueTooth keys (so that users will be notified if they have had physical contact, in the last 14 days, with someone who tested positive for COVID-19). In this latest version, there is no collection of a user profile or geolocation data, so there is no way to determine the user's identity or the people they contacted. The data recorded on the cell phone and the connections with the server in charge of receiving them are protected by encryption, and there is transparency about the deletion of data and verification mechanisms to avoid false information (TRINDADE, 2020).

FIGURE 3

Coronavirus – SUS app



Source: Blog da Saúde.

Statistics in Brazil are made by the Brazilian Institute of Geography and Statistics (IBGE). At the time of writing this article, the National Household Sample Survey focused on monitoring COVID-19 (PNAD-COVID) (FFLCH-USP, 2020) was in the period of data collection in the field. This research maps weekly and monthly population data regarding the disease, hospital infrastructure, and unemployment. In addition, there is underreporting of suspicions, cases and deaths, inability to

carry out mass testing, statistical limitations, and concomitant epidemics of dengue and influenza (JUCÁ and OLIVEIRA, 2020).

Thus, even with current legislation, which provides guarantees for citizens and ensures a tradition of data protection in Brazil (FGV, 2020), there are still gaps in terms of security, reaffirming that privacy is not necessarily security (PENDÃO, 2012), which establishes a conflict between the right to health and the right to data protection, which is resolved by the rule of proportionality. Thus, the legal framework did not guarantee that users' data were protected, affecting informational self-determination. In addition, there are situations about which the law does not discourse, which occurs in part because the LGPD does not present recitals, which would guide, in a broader way, events that could potentially occur. Furthermore, this is an example of how to foster the policy cycle by using anonymized data collected by various organizations.

Measures adopted by the European Union

The European Commission released a guide with parameters for the development of contact tracing technology. Technology must comply with GDPR (SCHREIBER, 2020), data must be anonymized, the active location must not be collected, applications must not be invasive, and must be approved by national health authorities (BLASI, 2020). It is understood, therefore, that Europe sought to insert technology in the fight against COVID-19 in the least harmful and invasive way that was also more beneficial to its citizens (FINKELSTEIN, FEDERIGHI, and CHOW, 2020).

At the national level, the German app Corona-Datenspende facilitates the monitoring of COVID-19 and verifies the effectiveness of the measures adopted. The app monitors volunteers' vital signs, checking for symptoms (BUSVINE, 2020). France and Italy are developing apps, and Spain is waiting for the EU app.

FIGURE 4

Corona-Datenspende App



Source: MDR (2020).

In the case evaluated, the Corona-Datenspende application contributes by offering the most detailed reports to the public among those analyzed in this study. The app counts on users' consent and brings more transparency than the Coronavirus – SUS, which adopted the idea of consent granted by using the app. However, the user does not lose the right to object to personal data processing.

Thus, rather than observing the EU's actions in isolation, one must analyze the context to understand that the European data protection tradition demonstrates that, even when processing personal data without consent is an option, other resources are prioritized that preserve the privacy of the citizen. Thus, the rule of proportionality is not used in this case, as there is no collision of fundamental rights when consent prevails without prejudice to the right to privacy. Furthermore, this case illustrates how it can collect real-time data to promote public policies.

CONCLUSION

This analysis presented how the government applied personal data to managing the COVID-19 crisis considering the legal frameworks in Brazil and the European Union. In Brazil, the processing of personal data takes place based on an intense and constant data flow (which is not provided in real-time to avoid retaliation) through SIMI – SP system and the Coronavirus – SUS app, which contributes to public health but presents limitations, such as underreporting of cases. In this case, the motivation to process personal data is to guarantee the right to health while promoting the policy cycle and resorting, when necessary, to processing personal data without the subject's consent. In the EU, the processing of personal data takes place based on more available information collected by Corona-datenspende. However, it depends on the public's adherence to the application and user consent, in addition to the obstacle of underreporting.

This discussion contributes to administrative practice as it maps governmental actions, analyzes norms, and explains the parameters of what can be done. In addition, the rule of proportionality indicates the possibility of prioritizing the right to health over the right to privacy and data protection. In each case, the rule must be applied again, as it is not just about violating one right in favor of another but the extent to which this occurs. Therefore, the right to privacy and data protection is not being completely violated, nor is the right to health being fully provided only by analyzing a situation and the respective choice of a right as a priority.

Thus, the two researched governments use data to fight the COVID-19 pandemic since data support the policy cycle and facilitate the management of the crisis. Data is handled through applications, geolocation systems, household surveys, and international cooperation in compliance with legislation.

It is worth mentioning that such data are essential in the policy cycle, which needs a large volume of data and a constant flow of information (JANNUZZI, 2009). They are essential to establish a precise focus of action since a good policy design – the first part of the cycle – cannot be done without a good diagnosis, which is only possible when consolidated and tested indicators form the starting point to answer the problem.

Data are also indispensable for policy implementation as they allow directing responses according to the diversity of problems. For example, maps and data with the delimitation of territories and different socioeconomic conditions make it possible to act differently, respecting the need identified according to the behavior of the pandemic – which also manifests unequally throughout the country, states, municipalities, and neighborhoods.

When monitoring policy results, data on infected population, hospitalizations, and deaths safely allow a set of decisions such as the expansion or reduction of hospital beds, strengthening or easing social distancing measures, and permission of different economic activities, crucial for the safe return to normality and the equal security of the investments.

Therefore, despite the moral dilemmas between public and private interests, between saving lives or saving businesses by keeping them running, and between publicity and secrecy regarding data processing, it is clear the need for data to elaborate and implement good policies, which, in a crisis such as the pandemic, means saving lives and offering safe conditions to carry out economic activities. In addition, the substantive issue persists, and the fact that Brazil did not officially publish geolocation data at the intra-municipal level to help improve public policies in the fight against the COVID-19 pandemic remains a national discussion.

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