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Right to be forgotten in healthcare: a scoping review

Direito ao esquecimento nos cuidados de saúde: uma revisão de escopo

Derecho al olvido en la asistencia sanitaria: una revisión exploratória

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ABSTRACT

Objective: To conduct a scoping review of the literature on the right to be forgotten in healthcare and discuss its ethical, legal, and technological implications.

Method: A scoping review based on the Joanna Briggs Institute method. The inclusion criteria were descriptive, qualitative, quantitative studies, and systematic literature reviews that included patients from health services on the right to be forgotten, between 2018 and 2025. Editorials, theses, dissertations, experience reports, theoretical essays, abstracts of scientific events, and books were excluded. The search was conducted in the PubMed, MedLine, and Web of Science databases.

Results: Five articles were analyzed. One discusses a position statement highlighting recent data on cancer cure and social rehabilitation of patients; another addresses the right to be forgotten in transgender people; the third analyzes the challenges that the General Data Protection Regulation presents for hospital management; and two deal with the use of intelligent health systems as a means of applying the regulation.

Conclusion: The right to be forgotten may be essential for individuals who have mitigated situations of heightened health risk, but it may also conflict with the rights to memory and legal certainty. It is necessary to define ethical and legal criteria for deleting health data (right to be forgotten) and invest in technology that ensures the protection and integrity of information.

Descriptors: Health Law. Healthcare. Patiente Data Privacy. Confidentiality.

RESUMO

Objetivo: Realizar uma revisão de escopo da literatura sobre o direito ao esquecimento nos cuidados de saúde e discutir as suas implicações ético-legais e tecnológicas.

Método: Revisão de escopo com base no método Joanna Briggs Institute. Os critérios de inclusão foram estudos descritivos, qualitativos, quantitativos e revisões sistemáticas da literatura, que incluam pacientes dos serviços de saúde sobre direito ao esquecimento, no período entre 2018 e 2025. Foram excluídos os editoriais, teses, dissertações, relatos de experiências, ensaios teóricos, resumos de eventos científicos e livros. A pesquisa foi realizada nas bases de dados PubMed, MedLine e Web of Science.

Resultados: Foram analisados cinco artigos. Um discute sobre uma tomada de posição para destacar os dados recentes sobre a cura do câncer e da reabilitação social dos pacientes; e outro aborda o direito ao esquecimento em pessoas transgênero, o 3ª analisa os desafios que o Regulamento Geral sobre a Proteção de Dados apresenta para a gestão hospitalar, e dois tratam do uso de sistemas de saúde inteligentes enquanto meio de aplicação do regulamento.

Conclusão: O direito ao esquecimento pode ser imprescindível para pessoas que tenham mitigado situações de risco agravado de saúde, mas também pode conflituar com o direito à memória e com a segurança jurídica. É necessário definir critérios éticos e legais para apagar dados em saúde (direito ao esquecimento) e investir em tecnologia que garanta a proteção e a integridade da informação.

Descritores: Direito Sanitário. Cuidados de saúde. Privacidade dos Dados do Paciente. Confidencialidade.

RESUMEN

Objetivo: Realizar uma revisão de escopo da literatura sobre o direito ao esquecimento nos cuidados de saúde e discutir as suas implicações ético-legais e tecnológicas.

Método: Revisión del alcance basada en el método del Instituto Joanna Briggs. Los criterios de inclusión fueron estudios descriptivos, cualitativos, cuantitativos y revisiones sistemáticas de la literatura, que incluyeran a pacientes de los servicios

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de salud sobre el derecho al olvido, en el período comprendido entre 2018 y 2025. Se excluyeron editoriales, tesis, disertaciones, relatos de experiencias, ensayos teóricos, resúmenes de eventos científicos y libros. La investigación se realizó en las bases de datos PubMed, MedLine y Web of Science.

Resultados: Se analizaron cinco artículos. Uno discute una postura para destacar los datos recientes sobre la cura del cáncer y la rehabilitación social de los pacientes; otro aborda el derecho al olvido en las personas transgénero; el tercero analiza los retos que el Reglamento General de Protección de Datos plantea para la gestión hospitalaria, y dos tratan del uso de sistemas de salud inteligentes como medio para aplicar el reglamento.

Conclusión: O direito ao esquecimento pode ser imprescindível para pessoas que tenham mitigado situações de risco agravado de saúde, mas também pode conflituar com o direito à memória e com a segurança jurídica. É necessário definir critérios éticos e legais para apagar dados em saúde (direito ao esquecimento) e investir em tecnologia que garanta a proteção e a integridade da informação.

Descriptores: Derecho Sanitario. Asistencia sanitária. Privacidad de la Información del Paciente. Confidencialidad.

INTRODUCTION

Our society is becoming increasingly digitized. The pace of technological development and the way personal data is being processed universally affects all citizens. The new paradigm created by technology is eradicating one of the functions of human memory—the ability to forget(1–4).

The study begins with an analysis of the European Union (EU) legal framework on the right to be forgotten, seeking to understand its practical and ethical effects on healthcare. In this way, the EU sought to articulate all the interests at stake with the establishment of the General Data Protection Regulation (GDPR), in force since 2018. This analysis focuses on the GDPR as the central regulatory reference due to its consolidation and international influence(1,2,5–7).

The GDPR sets out detailed requirements for the collection, storage, and management of personal data. Personal data is any information about a specific person, identified or identifiable, referred to as the data subject, such as: name, address, cultural profile, IP address (internet protocol), data held by a healthcare institution (which unequivocally identifies a person for health-related purposes)(1,5).

The documents highlight the protection of individuals with regard to the processing of personal data as a fundamental right. It is therefore an essential measure to strengthen the fundamental rights of individuals in the digital era(3).

The right to be forgotten is the right that individuals have to delete information about themselves after a certain period of time. This right aims to ensure that past events in a person's life are forgotten, preventing new news or disclosures from being made about these events, thus avoiding the perpetuation of a given fact or event. The right to be forgotten aims to counteract the perpetuation of information and its accessibility, since the damage caused by its perpetuation can lead to irreparable harm to health and human personality, and in such cases, dignity may be at risk(3,8).

The GDPR establishes that the data subject has the right to obtain from the controller the erasure of their personal data without undue delay, and the controller has an obligation to erase personal data without undue delay(5,9).

If the data controller is obliged to erase the data, they must take reasonable steps, including technical measures, taking into account the available technology and the costs of implementation, to inform those responsible for the actual processing of personal data that the data subject has requested their erasure, if the processing of such data is not necessary(5,9).

Health is one of the main fundamental rights, that is, it is an essential social right of a universal nature. In recent decades, ethical problems in health and the biological sciences have been increasingly observed, also associated with technological evolution(10). Health information is a special category of personal data that is subject to special protection. It is the type of information directly or indirectly related to the present or future health of a person, whether alive or deceased, and their medical and family history. It is therefore prohibited to process personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, as well as genetic data, biometric data for the purpose of uniquely identifying a person, data concerning health, or data concerning a person's sex life or sexual orientation. In addition, in the event of the death of the data subject, there is a system in place to protect such particularly sensitive data. The rights relating to the personal data of deceased persons, including rectification and erasure, are exercised by the person designated by the deceased for that purpose or, failing that, by their heirs(1,9).

The right to health is a social right and one of the most difficult to achieve. Information is a citizen's right, and it is through information that people gain knowledge and the power to determine their own situation. In other words, it develops the exercise of their autonomy(10,11). This is an issue that should concern all health professionals in their daily practice, warranting widespread reflection on how health data and its perpetuation in computer systems can condition the future lives of patients(11–15).

From this perspective, this study aims to conduct a scoping review of the literature on the right to be forgotten in healthcare and discuss its ethical, legal, and technological implications.

METHOD

This literature review was conducted according to the Scoping Review (SR) method described in the Joanna Briggs Institute manual (2024)(16). The protocol for this SR was registered in the Open Science Framework (OSF) at osf.io/6gndp, as there are no similar review protocols. These reviews are very useful for synthesizing research evidence and are often used to map the existing literature in a given field in terms of its nature, characteristics, and volume(16,17).

Thus, the following phases were developed in this process: definition and alignment of research objectives and questions; development of inclusion criteria according to the objectives and questions; elaboration and planning of the search strategy and selection of studies; identification of relevant studies; selection of studies; data extraction; data mapping and summary of results. This review was reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA-ScR) extension for SR.

Research strategies

In the initial phase of the protocol, the scoping review methodology, PCC (Population, Concept, and Context), was used to construct the research question. This is a conceptual model used to structure the research question and define the inclusion criteria. Thus, the following were defined: Participants: patients, Concept: right to be forgotten, and Context: health services(16).

The inclusion criteria were descriptive, qualitative, quantitative studies, and systematic literature reviews that included health service patients and addressed the right to be forgotten between 2018 and 2025, i.e., after the date of publication of the GDPR to the present. All languages will be included. Editorials, theses, dissertations, experience reports, theoretical essays, summaries of scientific events, and books were excluded.

The initial question for review was defined as: What is the impact of the Right to be Forgotten on People receiving Healthcare? And the objective was to map how data stored in healthcare institutions can influence the experience of its owners and discuss the implications of its erasure from the perspective of the right to be forgotten in healthcare.

A three-step search strategy was used in this review. Initially, a review of the gray literature (Google Scholar and published books on the subject) and the CINAHL and Medline (PubMed) databases was conducted to ensure that knowledge on the subject to be mapped existed and that no other systematic reviews on this subject existed.

Next, a search was conducted in the PubMed, MedLine, and Web of Science databases on April 1, 2025. The controlled descriptors of terminology recommended by Medical Subject Headings (MeSH) used were PubMed, Medline, Web of Science "right to be forgotten" and "healthcare," and the Boolean operator used was AND. Third, the reference lists of all identified articles were analyzed.

The documents were extracted to the Zotero® 7.0.8 application, and duplicates were removed. From there, they were analyzed independently by two researchers using the Rayyan® application(18). In the first stage, the articles were evaluated by the two reviewers based on their titles and abstracts, taking into account the previously established inclusion criteria. Subsequently, the full articles were downloaded by mutual agreement. In case of disagreement or uncertainty between the two reviewers regarding the relevance of a study based on the abstract, the full articles were retrieved for further analysis.

The two reviewers examined the full texts independently and analyzed them against the inclusion criteria. Whenever a disagreement arose, a third researcher was asked to discuss the issue and reach a decision.

The studies identified from the list of references from previous research were evaluated for relevance based on their title and abstract.

Data Extraction

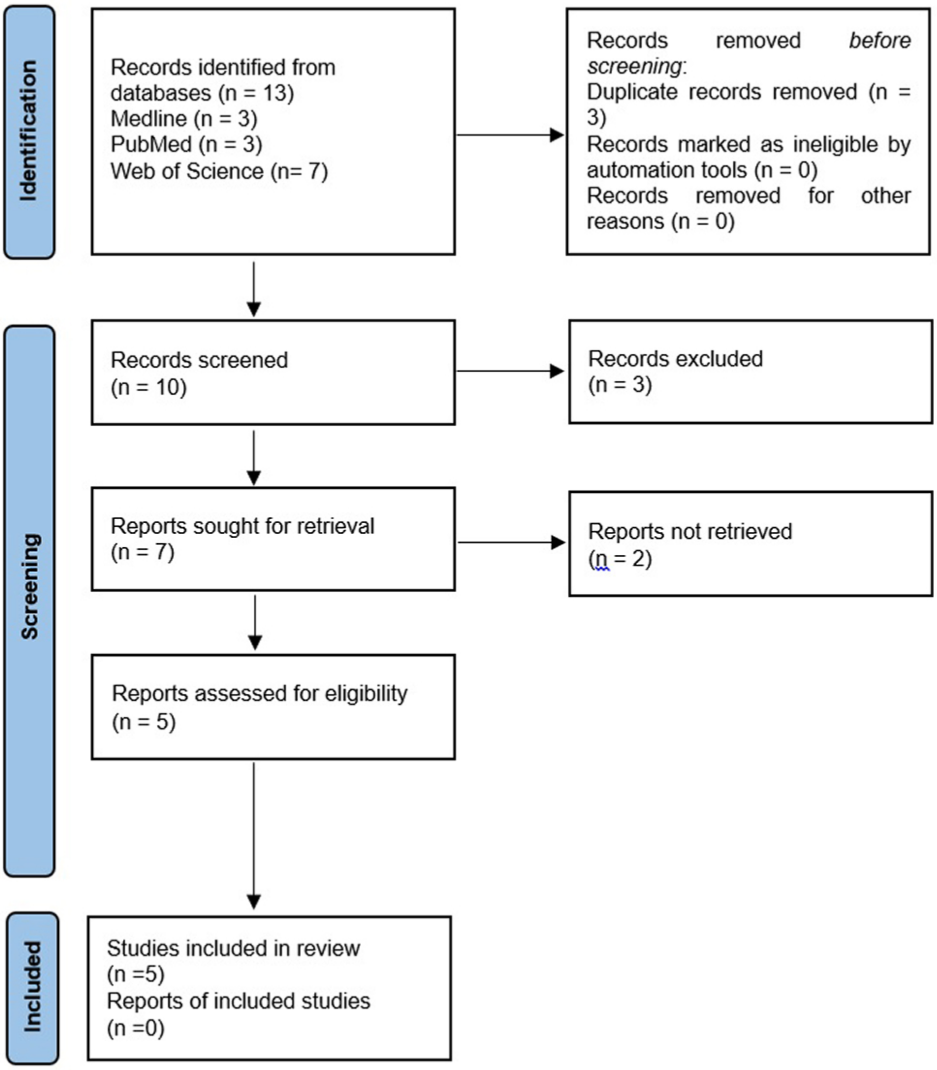
After the search, all articles obtained were identified and duplicates were removed. Titles and abstracts were analyzed according to the inclusion criteria.

Data extraction from the selected studies was performed using a proprietary tool structured in Microsoft Excel®, containing information on the author, title, year of publication, type of study, population, and main results, as indicated by the methodology developed by the Joanna Briggs Institute. The data obtained from the gray literature, collected in an initial mapping, did not generate studies eligible for the results, but were used for the discussion context.

The results were organized according to the nature of the studies, in a thematic description. Regarding ethical aspects, copyright was respected, and the authors of the works used were referenced. Due to the bibliographic nature of the research, ethical review, for example, by an ethics committee, was not necessary.

The results are presented in a flowchart of the selection of studies that comprise the research, adapted from PRISMA ScR (Figure 1)(16).

Figure 1 – Flowchart of study selection, adapted from PRISMA ScR (Lisbon, Portugal, 2025)



RESULTS

The results of the scoping review are presented in the following table with the following variables: article title; authors; year; type of study; population; and results found. Five studies published between 2019 and 2023 were included. Two qualitative studies, two quantitative studies, and one descriptive study (Chart 1).

The oldest article resulting from the scoping review conducted dates back to 2019, proving how this topic is beginning to have an impact and become the subject of ethical and legal concerns among healthcare professionals.

The article "Cancer cure and consequences for survivor care: Position paper of the Working Group on Survivor Care of the Italian Alliance Against Cancer" was prepared by a multidisciplinary panel of experts and cancer patients in Italy. They created a position paper to highlight recent data on "cancer cure" (i.e., the possibility of achieving the same life expectancy as the general population) and discuss the consequences of this concept on follow-up and rehabilitation strategies for survivors(21).

Approximately 5% of people in several European countries are living with a cancer diagnosis. It is estimated that this percentage will increase by about 3% per year and that a large proportion of these people will be alive 15 or more years after diagnosis. Therefore, patients who live many years after their cancer diagnosis and the end of treatment need to be recognized as cured and require specific interventions. With regard to the legal context, the authors point out that social and professional rehabilitation cannot be effective as long as cancer survivors continue to be discriminated against and excluded from access to insurance services, loans, or credit services linked to life insurance. In Italy, a previous diagnosis of cancer continues to be considered equivalent to a shorter life expectancy, and the stigma remains, regardless of the actual condition of cured or chronic disease. Cured cancer patients are often denied eligibility for adoption processes, as well as for obtaining a driver's license.

The authors argue that, to combat this discrimination, Italy should also implement a law on the "right to be forgotten," similar to the laws recently adopted in France, Belgium, the Netherlands, Luxembourg, and Portugal. This article refers to Law No. 75/2021, which strengthens access to credit and insurance contracts in Portugal for those who have overcome or mitigated situations of aggravated health risk or disability, prohibiting discriminatory practices and enshrining the right to be forgotten. This law, enshrining the right to be forgotten, improves access to credit and insurance contracts for people who have recovered from situations of aggravated health risk. It ensures that these individuals cannot be subject to increased insurance premiums or exclusion from insurance contract guarantees, and that no health information relating to the medical condition that gave rise to the aggravated health risk or disability can be collected or processed by credit institutions or insurers after the regulated period(21,23).

The article "Gender transition: is there a right to be forgotten?" establishes mechanisms, under the new European legal regime, to strengthen individuals' control over their personal data, namely the right to be forgotten. Although customers do not generally have a consistent right to delete or modify their health records, this traditional position has changed due to technological developments and the effects of data linking. There are already situations where it is considered legitimate to delete health data. For example, in the United Kingdom, requests for confidential treatment, including end-of-life plans and personal information that is no longer needed, included in the NHS database, can be deleted.

In gender transition, the right to be forgotten represents a powerful form of control for the owner over personal data, especially health data that may reveal a gender with which they do not identify and reject. For this reason, it is pertinent to differentiate whether the right to delete personal data in particular, health data, is ethically acceptable in gender transition.

In general, the right to be forgotten is valuable for dealing with outdated, useless, or decontextualized information. For example, a transgender person who has voluntarily undergone gender affirmation surgery obtains recognition of their gender transition in their official documents. As a result, they may wish to delete the clinical record confirming, for example, chest surgery, which unequivocally links them to a gender they do not wish to project in society(2).

Chart 1 – Characterization of articles according to title, authors, year of publication, type of study, population, and results (Lisbon, Portugal, 2025)

Title	Authors	Year	Type of Study	Population	Results
A unified method to revoke the private data of patients in intelligent healthcare with audit to forget(19)/"Um método unificado para revogar dados privados de pacientes em saúde inteligente com "auditoria para esquecer"	Zhou, et al	2023	Quantitative	Health System Clients	• Audit Forget Software (AFS), capable of evaluating and revoking customers' private data. Application in real-world smart healthcare to improve privacy protection and data revocation rights.
GDPR Compliant Data Storage and Sharing in Smart Healthcare System: A Blockchain-Based Solution(20)/ "Armazenamento e compartilhamento de dados compatíveis com o RGPD em saúde inteligente: solução baseada em blockchain"	Bai, et al	2022	Quantitative	Smart healthcare systems	• GDPR-compliant data storage and sharing structure using blockchain for the smart healthcare system
Cancer Cure and Consequences on Survivorship Care: Position Paper from Italian Alliance Against Cancer Survivorship Care Working Group(21)the possibility of achieving the same life expectancy as the general population "Cura do câncer e consequências no cuidado aos sobreviventes: documento de posição do grupo de trabalho da Aliança Italiana contra o Câncer"	Dal Maso,; et al	2022	Qualitative	Cancer survivors	• Cancer cure rates are fairly consistent across different high-income countries; • Acceptance of the term "cure" has increased in oncology literature and clinical practice. • It is necessary to enforce a law on the "right to be forgotten," which would eliminate inequality in access to insurance and credit services, protecting the rights of cancer survivors.

Chart 1 – Cont.

Title	Authors	Year	Type of Study	Population	Results
Gender Transition: Is There a Right to be Fogotten?(2)/ "Transição de gênero: existe direito ao esquecimento?"	Correia, M.; Rego, G.; Nunes, R.	2021	Descriptive	Transgender people	• Regarding the right to erase personal data, specifically medical and genetic records, in the context of gender transition, it was concluded that the admissibility of this right should be limited and regulated.
Digital Oblivion (The Right to Be Forgotten): A Big Challgenge for the Public Hospital Management in Greece (22)/ "Esquecimento digital (direito a ser esquecido): grande desafio para a gestão de hospitais públicos na Grécia"	Tsirintani, M; Serifi, M; Binioris, S.	2019	Qualitative	Public hospitals in Greece	• Despite the mandatory application of the new Regulation by hospitals, rights regarding personal health data are practically unenforceable. • Technically, the Regulation raises specific requirements without specifying the technical measures to be taken to protect personal data and enable individuals' rights.

As enshrined in European culture and legislation, the right to be forgotten raises interesting ethical questions, insofar as it does not limit the deletion of data of any kind(2,9).

Let us suppose that the right to be forgotten is considered a means of operationalizing data protection and privacy, both of which are conditions of identity. In this context, it makes sense to evaluate this legal mechanism for the entire exercise of identity in matters of gender transition. Thus, it is necessary to discuss the limits of the right to be forgotten with regard to information about gender transition, considering the principle of freedom and the principle of proportionality as the basis for human rights law. Based on these arguments, the right to be forgotten may raise ethical and legal difficulties in the following circumstances:

a) The right to erase genetic and health information related to gender transition makes it impossible to screen for genetic diseases, which is especially relevant when it comes to one's biological offspring. Therefore, direct biological relatives should have access to a collected genetic sample for as long as necessary to better understand their genetic status.

b) Researchers may have to rely on medical records to study how health issues manifest differently based on biological sex at birth. Consequently, the right to delete information associated with gender affirmation could be the starting point for exposing certain types of health research.

c) The right to forget gender-based health information may undermine selection in high-performance sports.

d) It may generate ethical conflicts with other circumstances, such as marriage and adoption. Depending on the jurisdiction, adoption and the use of medically assisted reproduction techniques may be restricted. The procedure may be jeopardized if medical history data has been deleted.

e) In case of regret: changing one's mind is also an exercise of autonomy, which is why the deletion of gender-based health data may harm the owner by preventing them from exercising a wide range of rights if data recovery is not possible.

There are strong arguments in favor of not deleting health data. Nevertheless, practical solutions already exist to better collect health data from transgender people and respect their privacy. After examining some interrelated and conflicting issues regarding the right to erase personal data, specifically medical and genetic records, in the context of gender transition, the authors concluded that the admissibility of this right should be limited and regulated.

In fact, given that it is impossible to forget by completely deleting data, but only to make access to it more difficult, the total solution to this problem may lie in technology. The deletion of genetic and health data can undoubtedly undermine the rights of direct biological relatives, as well as future generations, so it is argued that its deletion may be considered ethically unacceptable. Thus, the authors conclude that gender identity is a fundamental value related to personality, but it should not prevail without considering other values because it should not be considered absolute(2).

The article "Digital Oblivion (The Right to be Forgotten): A Major Challenge for Public Hospital Management in Greece" reinforces that the purpose of the GDPR is to protect individuals' personal data, giving them greater control over their data. Their study aims to verify the readiness of public hospitals in Greece to comply with the new protection regulation.

These authors concluded that deviations from Regulatory Compliance showed that public hospitals did not comply with: the Principle of Purpose and Transparency, the Principle of Data Minimization and Processing, the Process of Automatic Erasure of Personal Data (when the necessary time has elapsed), Data Integrity and Confidentiality, Limitation Authority, and Accountability Authority. Deviations from Technical Compliance showed that there are no specific roles and responsibilities for data security management, no active encryption method, and, furthermore, insufficient troubleshooting of operating systems and knowledge of information system security issues.

It was found that, despite the mandatory application of the new regulation by hospitals, rights regarding personal health data are virtually unenforceable. Although providing instructions on the maintenance or processing of personal data, technically the GDPR raises specific requirements without specifying the technical measures to be taken to protect personal data and enable individuals' rights(22).

In this regard, the authors of the article "A unified method for revoking private patient data in smart healthcare with audit to forget" emphasize that the revocation of private personal data is a basic human right, protected by the GDPR. However, this right is often ignored or infringed upon due to the increasing collection and use of patient data for model training. Currently, healthcare is one of the most promising areas for the implementation of artificial intelligence (AI) systems, known as smart healthcare. Computer-assisted diagnostic systems speed up the diagnosis of various diseases. However, as more and more patient data is being collected and used for model training in smart healthcare, their privacy is exposed to a high risk. Therefore, smart healthcare is a sector where technology must comply with the law, regulations, and privacy principles to ensure that innovation is for the common good. To comply with these privacy preservation regulations, methods for revoking private personal data are needed(19).

To ensure the right to be forgotten for healthcare customers, they have developed audit software for forgetting (AFS), which is capable of evaluating and revoking customers' private data. They demonstrate the usability of AFS and its potential application in real-world smart healthcare to improve privacy protection and data revocation rights. AFS will make a valuable contribution to better protection of people's privacy and the right to revoke data with the rapid development of smart healthcare(19).

The article "GDPR-compliant data storage and sharing in smart healthcare systems: a blockchain-based solution" states that smart healthcare systems provide user-centered healthcare services to patients based on information collected from them, which generates personal health information and personally identifiable information. Information flows into the smart healthcare system with or without any regulation and concern from patients with the help of new information and communication technologies (ICT). The use of ICT raises data security and privacy issues. The European Union has published the GDPR to regulate the flow of personal information. To this end, the authors propose a blockchain-based data storage and sharing framework for a smart healthcare system that complies with the "Privacy by Design" rule(20).

The proposed system also includes deletion from the system, in accordance with the GDPR rule "Right to be forgotten." Control of the data is assigned to the data owner. Medical data is managed solely by the data owner (storage, option, sharing, and deletion). The data is stored in encrypted form on-chain and off-chain. The result shows that the system provides security and privacy for health data and gives control to the owner rather than the service provider(20).

DISCUSSION

The right to health protection has been progressively recognized at the European and international levels as a fundamental right. Health data are considered sensitive and deserve specific treatment under the GDPR given the importance of this category of data. Ethical, legal, and social issues related to data in the computer systems of health institutions are growing in parallel with advances in digital health and computing technologies. Since 2018, critical debates and studies have emerged on privacy and the erasure of personal health data(7,8,24,25).

Considering the articles studied, it can be reflected that the right to be forgotten can be seen as a conflict between the right to memory and legal certainty. To the extent that deleting a person's personal data erases their memory, it may harm third parties and even harm the person themselves. In the case of health data, deleting data on hereditary diseases may harm descendants, and deleting data on contagious diseases may harm people with whom they live. In this case, we are faced with conflicts between fundamental rights(2,26).

However, literature on this right is still scarce. From the perspective of health data, which is a particularly sensitive category of personal data, there is a gap that must be filled by discussing the legal and ethical issues associated with exercising this right.

As enshrined in European culture and legislation, the right to be forgotten raises interesting ethical questions, in that it does not limit the deletion of data of any kind. According to the GDPR, the right to request the deletion of your health information seems to be guaranteed if the data is no longer necessary for the purpose for which it was collected or processed, or even if consent is withdrawn. The law does not appear to set limits on genetic and health data(2, 6).

With regard to the right to be forgotten, the protection of human dignity in terms of privacy, intimacy, honor, and image may prevail. Although this is in accordance with the right to self-determination, it raises ethical and legal questions that must be considered(6).

In some countries, the right to be forgotten still faces interpretative and regulatory obstacles, as the GDPR does not explicitly address this issue in the healthcare sector, which requires regulatory and doctrinal development. The GDPR establishes general principles and rules, but there are still significant gaps in specific regulations for the healthcare sector, especially regarding data erasure and the right to be forgotten(6,27).

The right to be forgotten is nothing more than a way of ensuring health, either by transcending trauma or by preventing isolation resulting from shame, or even overexposure in the information society, from leading to poor social relationships – which have been proven to increase the incidence of numerous other comorbidities, such as strokes and heart disease(28).

From this perspective, how can we justify that a person who beat cancer at age 4, at age 25, is prevented from accessing certain insurance policies? The "right to be forgotten" in oncology is a form of protection that several EU countries have begun to recognize for their citizens, with the aim of aligning the clinical recovery of a cancer patient with equality in access to financial, banking, insurance, and child adoption services with that of the general population. Thus, with this change, discriminatory practices have been prohibited, enshrining their right to be forgotten. This reflects the fact that for some cancer patients, despite being cured, relevant clinical, psychological, economic, and social implications may persist. There is a clear need to promote continuous progress in the full reintegration of cancer survivors into society, which implies eliminating the stigma associated with their medical history and promoting justice, equality, and respect for their human dignity(21,23,29).

There are solid arguments for not deleting certain health data. The balance between freedom of expression and privacy may be insufficient to achieve this goal. Nevertheless, practical solutions already exist to improve the protection of people's health data and their privacy(2, 29).

In the current context, it has become increasingly essential for healthcare providers to integrate applications into their healthcare delivery systems to improve the quality of care. These improve the sharing of health information between providers, patients, professionals, and other stakeholders involved in patient well-being. Although this computerization of care can support care delivery, it is fraught with privacy and security issues related to patients' health information(26).

The widespread development of artificial intelligence (AI)-based applications for healthcare has resulted in a push for effective and responsible ways to validate, govern, and regulate such systems. In this sense, it is necessary to continue investing in technology that ensures the maintenance of the necessary information to comply with the indicated restrictions. Examples include AFS and the blockchain system. The integration of blockchain technology can enable providers to improve data security and increase their ability to deliver quality care. However, more research is needed to identify appropriate blockchain technologies that can expand IT services that make an important contribution to better protection of people's privacy and the right to erase personal data. It is a blockchain system that gives patients control over their health data while satisfying the right to be forgotten(19,20,24,26,28).

Although there were no context or language limitations in the database search, this scoping review only found articles in the European context, under the GDPR. However, it would be interesting to explore this topic in other contexts, in line with the legislation applicable to them.

Since 2019, there have been regulatory/legal and technological advances related to the protection of personal health data. The right to be forgotten remains an important issue, with gaps in scientific literature and regulatory practice. There are few empirical studies analyzing the concrete impacts of the deletion of personal data on continuity of care, clinical safety, and information management. There is a lack of specific guidelines and international consensus on the ethical and technical criteria for the ethical exercise of the right to be forgotten in healthcare contexts.

From this perspective, it is necessary to discuss concrete situations regarding whether it is ethical and legal to delete health data and to propose safe and effective technological means to comply with this right, reconciling the right to privacy with the integrity of healthcare.

FINAL CONSIDERATIONS

Ethical, legal, and social issues related to personal data in healthcare institutions' computer systems are growing in parallel with advances in digital health and computing technologies.

As enshrined in European legislation, the right to be forgotten raises interesting legal and ethical questions, as it does not limit the deletion of data of any kind. In other words, the law does not set limits on genetic and health data.

Health information is any type of information directly or indirectly related to the present or future health of a person, whether alive or deceased, and their medical and family history. That is why it is necessary to discuss the limits of the right to be forgotten, considering the principle of freedom and the principle of proportionality. The question then arises as to whether the right to be forgotten conflicts with the right to memory and also with the right to freedom of expression. Is the right to be forgotten essential to the individual's exercise of health? Should this be a guaranteed fundamental right?

With this scoping review, it can be concluded that the right to be forgotten may be essential for people who have overcome or mitigated health risks or disabilities, for example, cancer survivors, prohibiting discriminatory practices and enshrining their right to be forgotten, thereby reducing the stigma associated with these health conditions. On the other hand, this right may conflict with the right to memory and also with legal certainty, because by deleting a person's personal data, their memory is erased, which may harm third parties; it may even harm the person themselves.

This is an issue that should concern all healthcare professionals in their daily practice, as they should be concerned about personal health data and its perpetuation in computer systems, as it can affect the future lives of patients. Regarding information, healthcare professionals have a duty to inform people about the resources they can access, in order to empower them, both in terms of personal autonomy and health protection.

It can therefore be concluded that it is necessary to discuss in which specific situations it would be ethical and legal to delete health data to ensure the protection of individual and collective health. Challenges for the future include the significant variation in how different countries implement data protection regulations, influenced by local health systems, insurance companies, and banking institutions. It is essential to create mechanisms to ensure that these regulations do not infringe on other fundamental rights, such as freedom of expression and the right to information. Finally, it is necessary to develop and implement technologies in health services that can securely manage the deletion of health data, maintaining the integrity of the necessary data, but also of health care.

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