

Nursing in the COVID Era: Standards and Safety

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Abstract

A documentary review was carried out on the production and publication of research works related to the study of the variable Nursing in the COVID era: Standards and Safety in Latin America. The purpose of the bibliometric analysis proposed in this document is to know the main characteristics of the volume of publications registered in the Scopus database during the period 2020-2021 in Latin American countries, achieving the identification of 394 publications. The information provided by this platform was organized using tables and figures, categorizing the information by Year of Publication, Country of Origin, Area of Knowledge, and Type of Publication. Once these characteristics were described, the position of different authors regarding the proposed topic was referenced through qualitative analysis. Among the main findings of this research, it is found that Brazil, with 217 publications, is the Latin American country with the highest production. The Area of Knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of Nursing in the COVID era, Standards and Safety was *Nursing* with 217 published documents, and the Type of Publication that was most used during the period indicated above was the Journal Article, which represents 83% of the total scientific production.

Keywords: Nursing, COVID-19, standards, safety

Introduction

COVID-19 is an infectious disease that spreads through various body fluids and respiratory particles and was declared a pandemic in early 2020, changing the way people relate to each other and implying certain challenges in nursing care, as this is an essential practice of the profession and involves an interpersonal relationship with the patient. Therefore, certain norms had to be implemented to guarantee the safeguarding of the healthcare personnel's health, implementing safety protocols that would allow them to continue exercising their functions by treating both patients with COVID-19 and those admitted for other conditions in a biosecure way without putting the health of the healthcare personnel and patients at risk. Nursing was certainly a protagonist in caring for and preventing the spread of COVID-19 in the health area, but being in direct contact with patients, it became necessary to implement rules,

which were given by the WHO (World Health Organization) to prevent the spread of infection, being necessary the use of protective equipment, training on the subject of Biosafety Standards and availability of implements (quishpi Lucero, 2020).

In Latin America, governments decreed a state of emergency in March to implement measures that would guarantee the preservation of general welfare, limiting freedom of movement and prohibiting events with many people in the same place, as well as decreeing certain biosecurity measures aimed at preventing the spread of this disease through self-care and compliance with the rules imposed to make health care safer as the patient, the health professional and his family are at risk. In Latin America, despite the implementation of biosafety measures, in some vulnerable populations, it was difficult to comply with them because they did not have the necessary training on the care that health personnel should

take and how to treat biohazardous material, in addition to not having the protective equipment that would enable them to carry out their activities with the least possible risk.

Thanks to the above, it can be said that in the March of COVID-19, the governments decreed several safety standards for the Rea d la say to avoid the spread of COVID-19, which also implied a training that in some communities was not given satisfactorily due to the social gap that characterizes the Latin American society. Therefore, it is important to know the current state of research related to Nursing in the COVID era: Standards and Safety in Latin America in terms of bibliographic resources, so a bibliometric analysis of the scientific production registered in the Scopus database during the period 2020-2021 is proposed to answer the question: How has the production and publication of research papers related to the study of the variable Nursing in the COVID era: Standards and Safety in Latin America been during the period 2020-2021?

2. General objective

To analyze from a bibliometric and bibliographic perspective, the production of high impact research papers on the variable Nursing in the COVID era: Latin American Standards and Safety during the period 2020-2021.

3. Methodology

Quantitative analysis of the information provided by Scopus is performed under a bibliometric approach on the scientific production regarding Nursing in the COVID era: Standards and Safety. Likewise, it is analyzed from a qualitative perspective, examples of some research works published in the area of study mentioned above, from a bibliographic approach to describe the position of different authors on the proposed topic.

The search is performed using the tool provided by Scopus and the parameters listed in Table 1 are established.

3.1 Methodological design

	PHASE	DESCRIPTION	CLASSIFICATION
PHASE 1	DATA COLLECTION	Data was collected using the Scopus web page search tool, through which a total of 394 publications were identified.	Published papers whose study variables are related to Nursing in the COVID era: Standards and Safety. Research papers were published during the period 2020-2021. Without distinction of the country of origin. Without distinction of the area of knowledge. Without distinction of the type of publication.
PHASE 2	CONSTRUCTION OF ANALYSIS MATERIAL	The information identified in the previous phase is organized. The classification will be made through graphs, figures, and tables based	Word Co-occurrence. Year of publication Country of origin of the publication.

		on data provided by Scopus.	Area of knowledge. Type of publication
PHASE 3	DRAFTING OF CONCLUSIONS AND FINAL DOCUMENT	After the analysis carried out in the previous phase, we proceed to the drafting of the conclusions and the preparation of the final document.	

Table 1. Methodological design.

Source: Own elaboration (2022)

4.1 Co-occurrence of words

Figure 1 shows the co-occurrence of keywords within the publications identified in the Scopus database.

4. Results

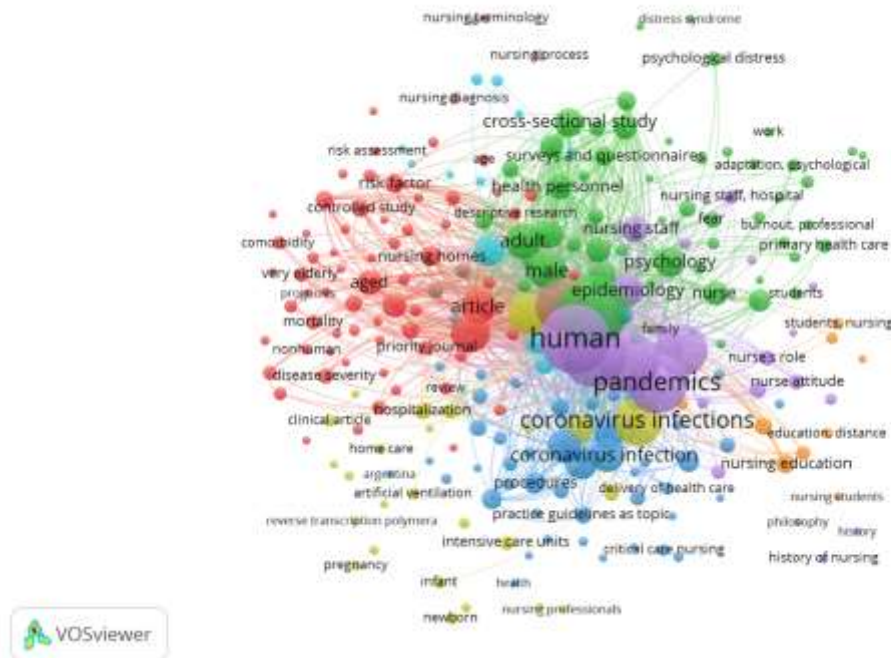


Figure 1. Co-occurrence of words

Source: Own elaboration (2022); based on data provided by Scopus.

As shown in Figure 1, the most used keyword is human which is the component that encompasses nursing care all being of an interpersonal nature, which was affected since with the pandemic declared in March 2021 physical contact was restricted to prevent contagion and safeguard general welfare. Keywords such as pandemic, Coronavirus, and epidemiology are found, which shed light on the exceptional situation that was seen in greater magnitude in 2020 and 2021, establishing quarantine in all Latin American countries due to the seriousness of the situation. Health personnel, nursing, norms, and biosecurity are keywords that deal with the changes faced by nursing care when in direct contact with patients, the scenario being to implement biosecurity measures to prevent contagion from self-care and the correct use of protective uniforms as well as optimal training on the treatment of waste materials used in patients with COVID-19.

Although governments in Latin America have enacted several laws to guarantee welfare, there were certain challenges such as the shortage of protective materials, and the small number of health professionals compared to the dimension of the crisis when there were high peaks of contagion and the lack of a sufficient number of patients.

4.2 Distribution of scientific production by year of publication

Figure 2 shows how the scientific production is distributed according to the year of publication, taking into account the period from 2016 to 2021.

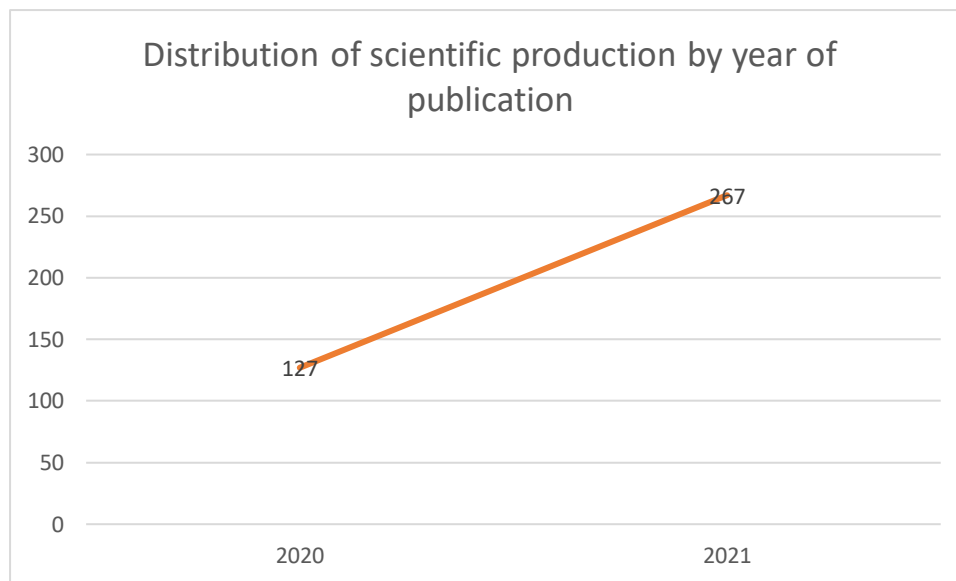


Figure 2. Distribution of scientific production by year of publication.

Source: Own elaboration (2022); based on data provided by Scopus.

2021 is the year with the highest number of publications related to the variables under study presenting 267 documents among which is the title “Knowledge and use of personal protective equipment by nursing professionals during the pandemic of Covid-19” (Moura et al., 2021). This document has as its main objective to determine the level of knowledge and use of protective equipment of health professionals during the pandemic. A study was conducted in the care units with the highest number of infected patients in Brazil through interviews, where it was found that most of the professionals did not have a good level of knowledge regarding the proper use of the equipment, putting them at risk of contracting this virus.

In the second place, there is 2020 which registers 127 documents in Scopus, within which is the one

entitled “Management of the ICU increase during the COVID-19 crisis: quick guidelines” (Aziz et al., 2020) this document performs an analysis and generates a summary of the current literature in the guidelines and Standards given by the WHO for health professionals to access key information on Nursing Safety. It offers a quick guide on organizational management in ICUs with patients with COVID 19 having strategies for dealing with a crisis, treatment of family members and prevention of infection from self-care, and the correct use of protective equipment.

4.3 Distribution of scientific production by country of origin

Figure 3 shows the distribution of scientific production according to the nationality of the authors

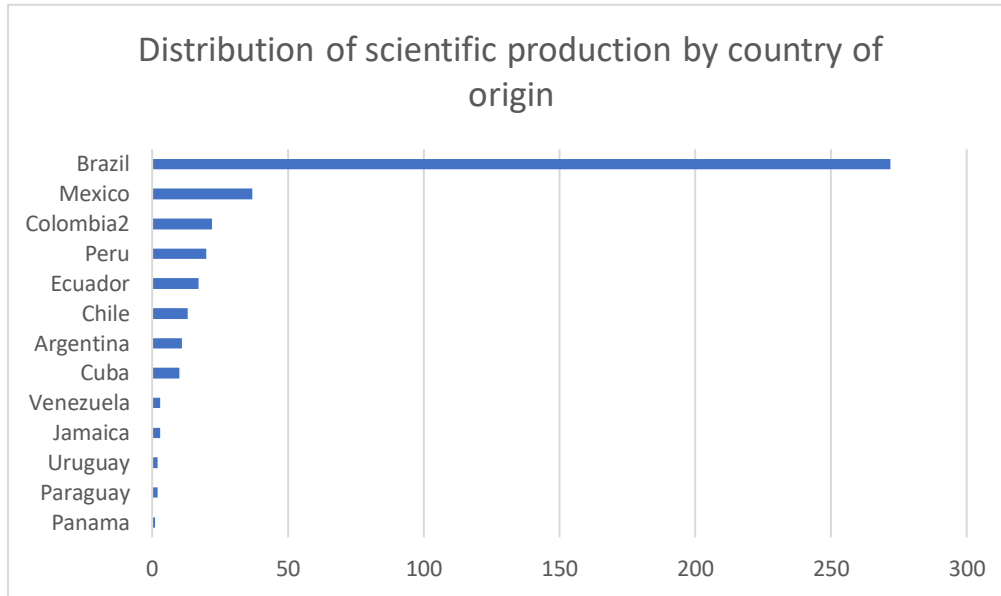


Figure 3. Distribution of scientific production by country of origin.

Source: Own elaboration (2022); based on data provided by Scopus.

each of the countries to add up as a unit in the overall publications. This is best explained in Figure 4, which shows the flow of collaborative work from different countries.

Brazil is the Latin American country with the greatest contribution to research on Nursing during COVID-19 and the Norms issued by this event presented a total of 272 documents within which is the paper with the title “Changes implemented in the work environment of nurses in the COVID-19 pandemic” (Santos, et al, 2021). This document describes the changes experienced by nurses in university hospitals during the pandemic, so descriptive research was conducted with 75 nurses from 3 hospitals in Brazil where the effort of nurses in the adaptation and reorganization of care processes to continue functioning efficiently without compromising or endangering the lives of professionals or patients was evidenced.

At this point, it should be noted that the production of scientific publications, when classified by country of origin, presents a special characteristic and that is the collaboration between authors with different affiliations to both public and private institutions, and these institutions can be from the same country or different nationalities, so that the production of an article co-authored by different authors from different countries of origin allows

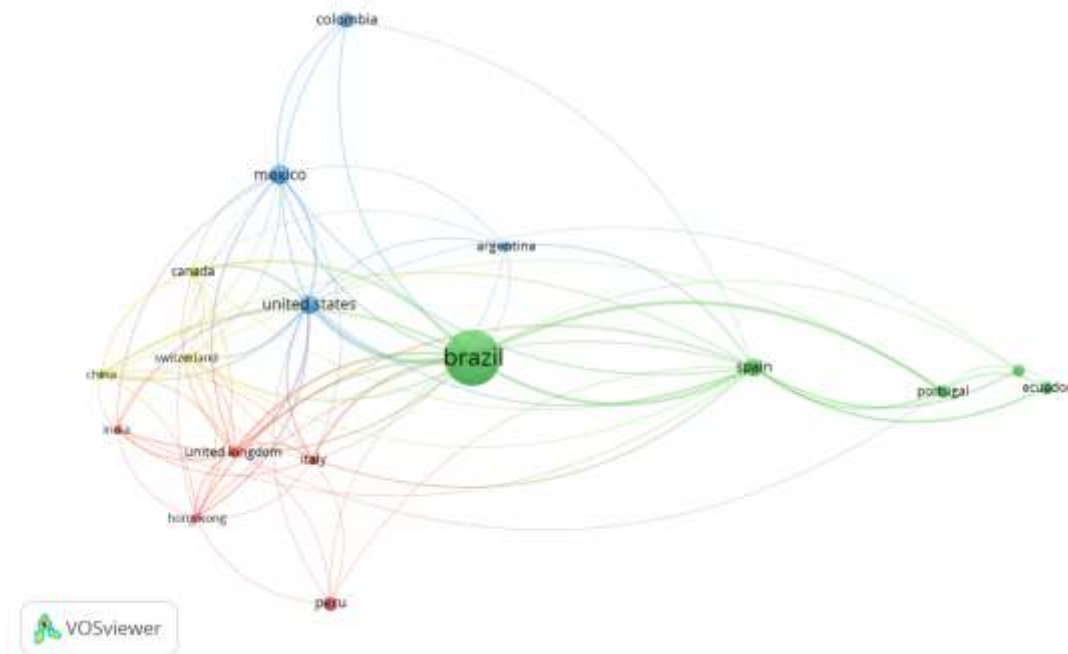


Figure 4. Co-citaciones entre países.

Source: Own elaboration (2022); based on data provided by Scopus.

As mentioned above, Brazil is the Latin American country with the highest number of publications related to the variables under study, presenting articles in collaboration with countries such as Spain, the United States, and Italy, which demonstrates the interest of countries outside Latin America in knowing how nursing will perform during the pandemic in 2020 and 2021. In second place is Mexico with 37 documents, some in collaboration with Canada and Switzerland and conducting comparative studies with countries such as Cologne and Argentina to determine the progress and shortcomings of the health system of the countries within which we can find “Clinical nurse specialist expands to the role of crisis management during the pandemic of COVID-19” (Ladak, Lee, & Sasinski, 2021). This paper aims to determine how clinical nurse specialists adapted to the needs of the care units to cope with the crisis by identifying problems, more efficient hospital rounds, and using efficient information for use in health risks. It is concluded that clinical nurse specialists played an important role in planning, training, and assessing crisis preparedness.

4.4 Distribution of scientific production by area of knowledge

Figure 5 shows how the production of scientific publications is distributed according to the area of knowledge through which the different research methodologies are executed.

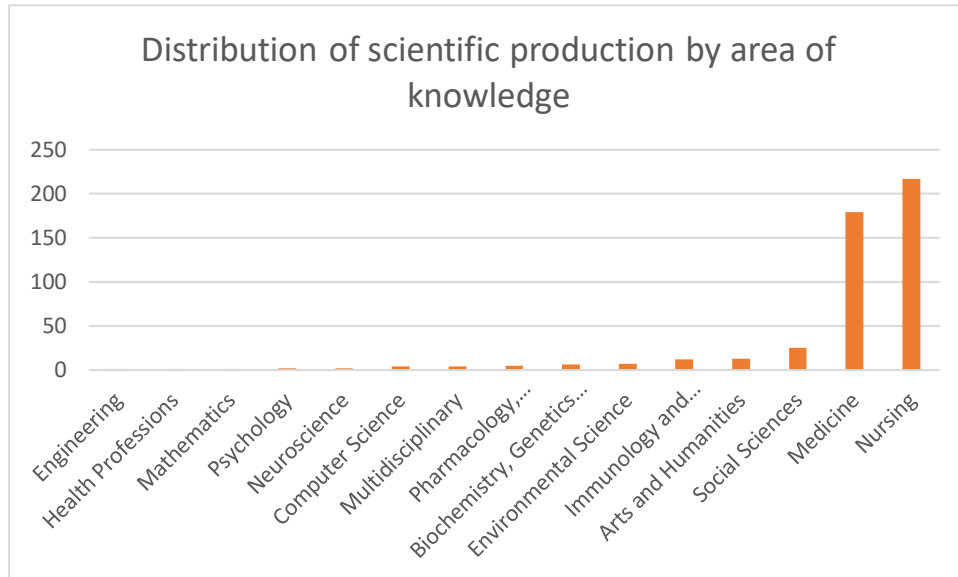


Figure 5. Distribution of scientific production by area of knowledge.

Source: Own elaboration (2022); based on data provided by Scopus.

Nursing is the area of knowledge with the largest number of contributions through the theories that are framed in it, in the search for new knowledge about nursing during COVID-19 and the care and standards that this contracted presenting 272 documents within which is “Covid-19 and long-term care institutions in Mexico: An unpayable debt” (Mena-Madrado et al., 2021). This document determines the risks to which the elderly living in long-term care facilities and the health personnel who care for them are exposed. This population is susceptible because they live together in common spaces and shared dormitories, in addition to the lack of training of personnel, so the national system must employ Biosafety Standards to prevent contagion and treat those affected efficiently.

In second place is medicine, the field in which 179 documents were written following the guidelines of the topics related to this area, including “Risk conditions in the health personnel of a pediatric COVID center in Mexico City” (Márquez-González et al., 2021), whose main objective is to identify the known risk factors for contagion and the serious outcomes that this implies for health

personnel who are susceptible to this situation. Therefore, a study was conducted in a pediatric center in Mexico through interviews with 812 participants between 41 and 11 years of age, where it was found that medical nursing staff presented a higher proportion of the use of standard pan-protection measures.

4.5 Type of publication

Figure 6 shows how the bibliographic production is distributed according to the type of publication chosen by the authors.

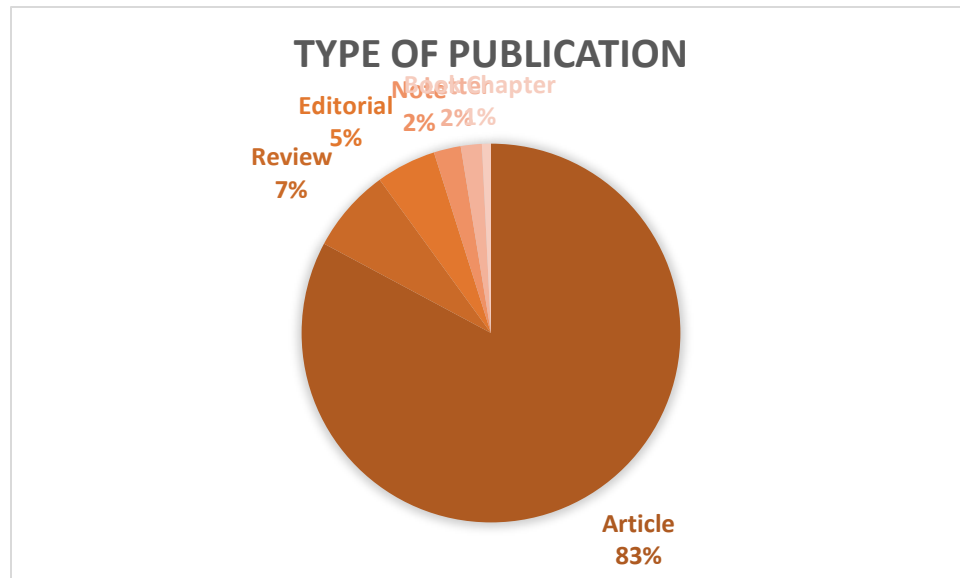


Figure 6. Type of publication

Source: Own elaboration (2022); based on data provided by Scopus.

As shown in Figure 6, within the different types of publications, 83% of the total number of documents identified through Phase 1 of the Methodological Design, correspond to Journal Articles, among which is the one entitled “Challenges faced by pediatric nursing workers in the face of the covid-19 pandemic” (Góes, et al., 2020). This document has as its main objective to identify the challenges faced by pediatric nursing workers as a consequence of the COVID-19 pandemic. Therefore, interviews were conducted with health care personnel in a pediatric care unit where challenges such as the quality of care provided, the lack of equipment for health care personnel to prevent contagion, and the lack of personnel were identified.

In second place are the reviews which represent 7% of the total number of documents identified in this study, among which is “Knowledge, Attitudes and Practices (KAP) in the face of the COVID-19 pandemic in the Americas: A preliminary systematic review” (Sarria-Guzman et al., 2021). This document seeks to identify and evaluate reports associated with the knowledge, attitudes,

and practices of health professionals during the pandemic by conducting a systematic review where 13 articles were eligible which conducted surveys of professionals, family members, and ordinary citizens giving us varying perspectives of the same situation. This review provides information for the development of campaigns by governments in the prevention of COVID-19

5. Conclusions

Thanks to the bibliometric analysis proposed in the present research, it can be determined that Brazil is the Latin American country with the highest number of bibliographic records in the Scopus database during the period between 2020 and 2021 with a total of 272 documents. The scientific production related to the study of Nursing during COVID-19 and the standards and safety that this represents, has presented an important growth during the period previously indicated, going from 127 publications in 2020 to 267 units in 2021, that is, it was possible to double the creation of bibliographic records in 2 years, which indicates the importance of researching on the challenges and the Standards generated by COVID-19 in the practice of Nursing, facing challenges for the exercise of its work.

The essential component of nursing is human care, which because of the pandemic was affected by changing how the patient-nurse relationship was given by restricting loyal physical contact. Because of the pandemic, biosecurity protocols were created to continue offering comprehensive health care, preventing the patient and nurses from being affected, all of this from the culture of self-care, but it was also necessary to train health personnel in the use of protective equipment and treatment of biological waste that represented a latent point of contagion. In Latin America, although certain norms were decreed through the State of Emergency to try to mitigate the contagion and the effects on public health, there were certain problems with its implementation since the most vulnerable populations did not have enough trained personnel and did not have the necessary protective equipment for the prevention of contagion in nurses. All of the above allows this article to conclude, highlighting the importance of knowing the theory or bibliographic resources that seek to arouse interest in research on the safety standards taken in the practice of nursing during the COVID 19 and the challenges that this implied. That is why the need for studies such as the one presented in this document is highlighted, which make a tour of those texts that address the aforementioned topic, to give the reader a broad view of the current situation of the literature on Nursing in the COVID era: Standards and Safety.

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