

Telemedicine in Family Medicine: Innovative Management for the Care of Migrants in Multicultural Settings

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Abstract

A documentary review was carried out on the production and publication of research papers related to the study of the variables Telemedicine, Innovation, and Family Medicine. The purpose of the bibliometric analysis proposed in this document was to know the main characteristics of the volume of publications registered in the Scopus database during the period 2017-2022, achieving the identification of 14 publications. The information provided by this platform was organized through graphs and figures, categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics have been described, the position of different authors on the proposed topic is referenced through a qualitative analysis. Among the main findings made through this research, it is found that the United States, with 7 publications, was the Latin American country with the highest scientific production registered in the name of authors affiliated with institutions of that nation. The Area of Knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of Telemedicine as an alternative in the care of migrant families was Medicine with 10 published documents, and the most used Publication Type during the period indicated above were Journal Articles with 72% of the total scientific production.

Keywords: *Telemedicine, Innovation, Family Medicine.*

1. Introduction

One of the advances that we find in the area of health is the so-called telemedicine, which has served as an innovative tool which has the potential to revolutionize the way in which health care services are currently being provided, with a focus on family medicine we highlight the impact that telemedicine has brought in the management of immigrant populations in multicultural environments, which is presented as an innovative solution to the difficulties associated with the health care needs of immigrants.

With the advent of improving patient care, family medicine aims to contribute to a more holistic environment in which primary health care is centered. However, being able to provide comprehensive care to the immigrant population suffers from many challenges, since one of the difficulties of having good care for these patients is linguistic

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understanding and cultural diversity, in addition to the limited access to health resources present in medical care. Based on this premise, the innovation factor has had a fundamental pillar in being able to address these challenges, the arrival of telemedicine emerges as a powerful tool which helps to break down geographical barriers and thus improve the quality of health, doctor and patient care.

The multicultural environments that are present in immigrants constitute a health challenge since these complex interactions present diverse care needs. With the advent of telemedicine, the aim is to be able to address all these multicultural needs with a great focus, which motivates health professionals to be able to close the linguistic gaps present in these communities through online resources for virtual interpretation and develop communication strategies adapted to different cultures. Not only does this improve the quality of patient-provider interactions, but it also fosters a more inclusive and empathetic healthcare environment.

Similarly, the geographical mobility of migrants can create logistical obstacles to accessing ongoing health care. One of the benefits of the implementation of telemedicine is the ability to offer remote consultations, which will allow health professionals to keep a much more constant control offer preventive care services and address multiple concerns through this medical consulting page. This not only ensures the continuity of care, but also minimizes disruptions to the health journey of migrants who may relocate frequently.

As we make known what are the benefits and the difficulties that may arise at the time of the implementation of family telemedicine around immigrant communities, it becomes evident that this innovative approach for the health sector has the properties and characteristics to be able to significantly improve patient care. In the following sections, we will explore specific case studies, discuss implementation strategies, and examine the ethical considerations surrounding the use of telemedicine in family medicine for immigrants in multicultural settings. For this reason, this article seeks to describe the main characteristics of the compendium of publications indexed in the Scopus database related to the variables Telemedicine, Innovation, Family Medicine, as well. Such as the description of the position of certain authors affiliated with institutions, during the period between 2017 and 2022.

2. General Objective

To analyze, from a bibliometric and bibliographic perspective, the preparation and publication of research papers in high-impact journals indexed in the Scopus database on the variables Telemedicine, Innovation, and Family Medicine during the period 2017-2022.

3. Methodology

This article is carried out through a research with a mixed orientation that combines the quantitative and qualitative method.

On the one hand, a quantitative analysis of the information selected in Scopus is carried out under a bibliometric approach of the scientific production corresponding to the study Telemedicine, Innovation, Family Medicine. On the other hand, examples of some research works published in the area of study mentioned above are analyzed from a qualitative perspective, based on a bibliographic approach that allows describing the position of different authors on the proposed topic. It is important to note that the entire search was carried out through Scopus, managing to establish the parameters referenced in Figure 1.

3.1. Methodological design

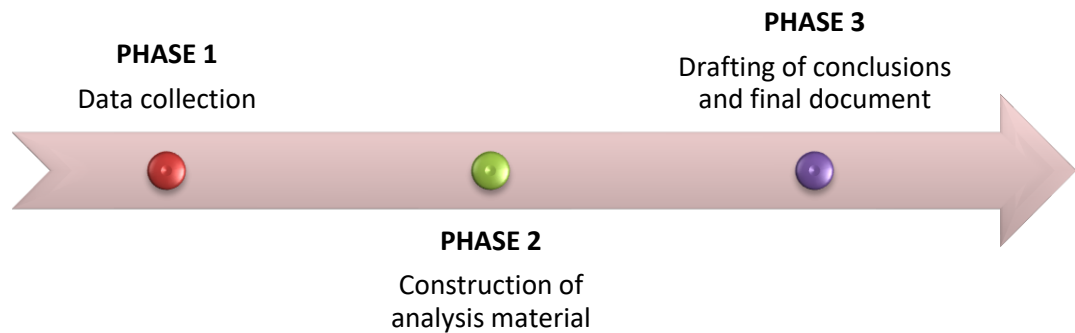


Figure 1. Methodological design

Source: Own elaboration

3.1.1 Phase 1: Data collection

Data collection was carried out from the Search tool on the Scopus website, where 14 publications were obtained from the following filters:

TITLE-ABS-KEY (telemedicine, AND innovation, AND family AND medicine) AND PUBYEAR > 2016 AND PUBYEAR < 2023

- Published documents whose study variables are related to the study of the variables Telemedicine, Innovation, Family Medicine.
- Limited to the period 2017-2022.
- Without distinction of country of origin.
- Without distinction of area of knowledge.
- No distinction of type of publication.

3.1.2 Phase 2: Construction of analytical material

The information collected in Scopus during the previous phase is organized and then classified by graphs, figures and tables as follows:

- Co-occurrence of words.
- Country of origin of the publication.
- Area of knowledge.
- Type of publication.

3.1.3 Phase 3: Drafting of conclusions and outcome document

In this phase, the results of the previous results are analysed, resulting in the determination of conclusions and, consequently, the obtaining of the final document.

4. Results

4.1 Co-occurrence of words

Figure 2 shows the co-occurrence of keywords found in the publications identified in the Scopus database.

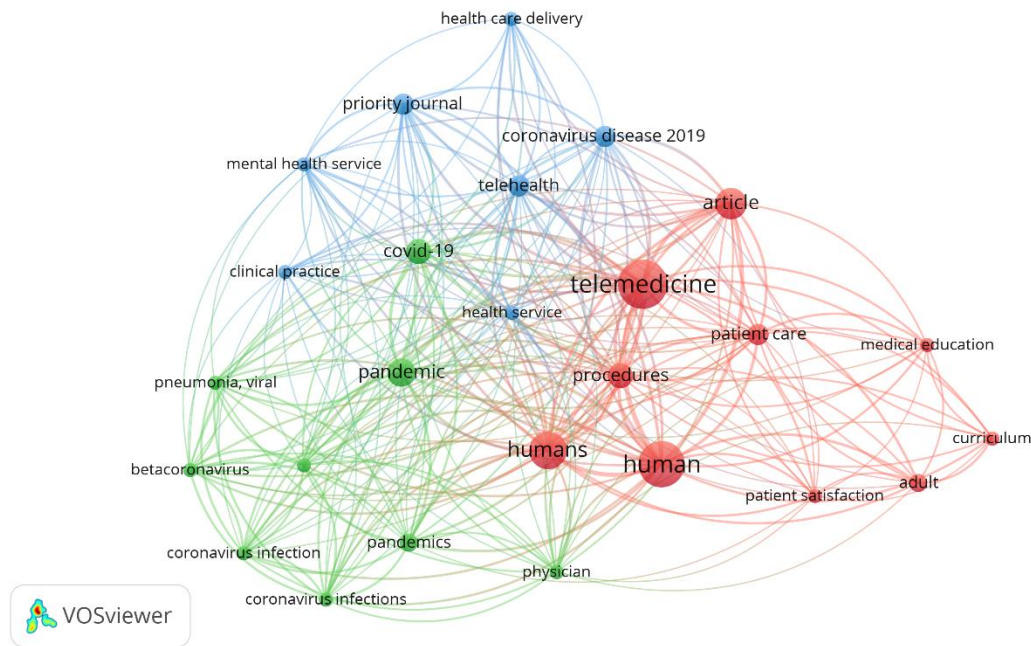


Figure 2. Co-occurrence of words

Source: Authors' own elaboration (2023); based on data exported from Scopus.

Telemedicine was the most frequently used keyword within the studies identified through the execution of Phase 1 of the Methodological Design proposed for the development of this article. Procedures are among the most frequently used variables, associated with variables such as Sustainability, Innovation, Medical Education, Pandemic, Clinical Practice, and Immigrants. From the above, it is striking, telemedicine in family medicine stands as a beacon of innovation in the care of migrants in multicultural environments. It has demonstrated its ability to transcend geographical, cultural, and language barriers, providing a comprehensive, patient-centered approach to healthcare delivery. Telemedicine allows immigrants to receive medical care without having to physically travel to an office, thus overcoming these barriers. It can also integrate remote interpreting services, facilitating communication between the immigrant patient and the health professional, even if they speak different languages. This improves the quality of care and understanding of medical instructions.

4.2 Distribution of scientific production by year of publication

Figure 3 shows how scientific production is distributed according to the year of publication.

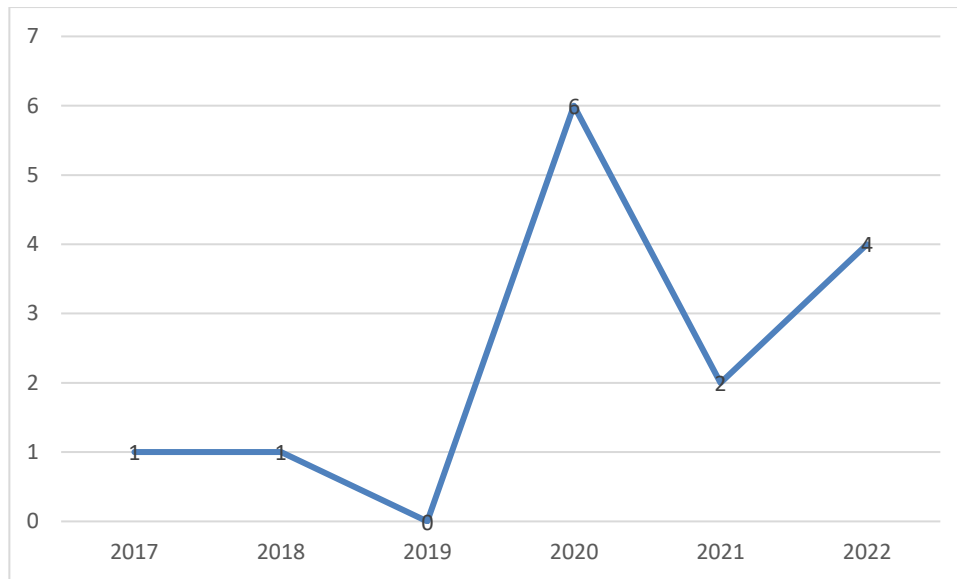


Figure 3. Distribution of scientific production by year of publication.

Source: Authors' own elaboration (2023); based on data exported from Scopus

Among the main characteristics evidenced through the distribution of scientific production by year of publication, it is notorious a level of number of publications registered in Scopus in the years 2020, reaching a total of 6 documents published in journals indexed on this platform. This can be explained by articles such as the one entitled "Patient and Family Perceptions on the Provision of Medications as Part of Virtual Outpatient Consultations for Children During the COVID-19 Pandemic" Objectives: To assess (1) patient/parent/caregiver and healthcare professionals' views and perceptions on the medication optimization (MO) process after the virtual outpatient clinic (VOC) during the COVID-19 pandemic and (2) the processes introduced at this time. Identify areas for improvement and suggest possible solutions. Design: A mixed-methods service evaluation using qualitative and quantitative methods of the OM pathway in children aged 0 to 18 years after VOC in three specialized children's units. Semi-structured interviews were conducted by telephone and participants explored their experiences and categorized by topic. Process mapping sessions with the multidisciplinary team identified areas for improvement and an easy-impact framework for potential solutions was developed. Outcome measures included: (1) interview topics, (2) patient satisfaction rates, (3) process maps, and (4) development of a streamlined future process. Results One hundred and twenty-five patient families were contacted: 71 families consented to participate and their opinions were classified into four main themes: (1) patient experience, (2) communication, (3) need for virtual video consultations for patient education. by hospital pharmacists and (4) need for electronic processes to send prescriptions to local pharmacies. The mean patient satisfaction rate was 96% (range 67%-100%).(Makhecha, 2022)

4.3 Distribution of scientific production by country of origin.

Figure 4 shows how the scientific production is distributed according to the nationality of the authors.

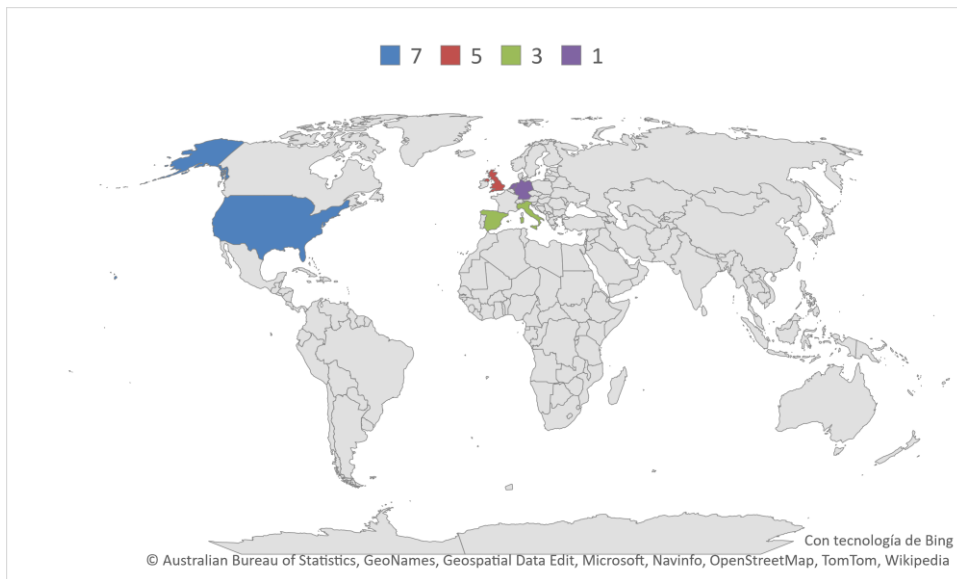


Figure 4. Distribution of scientific production by country of origin.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

Within the distribution of scientific production by country of origin, the records from institutions were taken into account, establishing the United States as the country of that community, with the highest number of publications indexed in Scopus during the period 2017-2022, with a total of 7 publications in total. In second place, the United Kingdom with 5 scientific papers, and Italy occupying third place presenting to the scientific community, with a total of 3 documents among which is the article entitled "Practices and policies related to the COVID-19 pandemic that affect the continuity of behavioral health care among children with diabetes" The purpose of this article is to describe the practices and policies related to the COVID-19 pandemic that affect the continuity of behavioral health care among children with diabetes. Challenges and opportunities were encountered at the provider, patient, and family levels during the rapid transition period from in-person to online care to ensure continuity of services. Institutional, regional, and national policies that impacted the care team's ability to respond quickly to changing patient needs were offset by those related to standards of care, education and training, and resource constraints. At the policy level, COVID-19 re-exposed a number of complicated and long-standing issues about professional licensing among behavioral health providers at the local and state levels and national restrictions on long-distance practice during times of crisis. Issues regarding insurance reimbursement and regulations aimed at protecting the public may need to adapt and evolve as the practice of behavioral medicine increasingly takes place remotely, online, and over great distances.(Clary, 2021)

4.4 Distribution of scientific production by area of knowledge

Figure 5 shows the distribution of the elaboration of scientific publications based on the area of knowledge through which the different research methodologies are implemented.

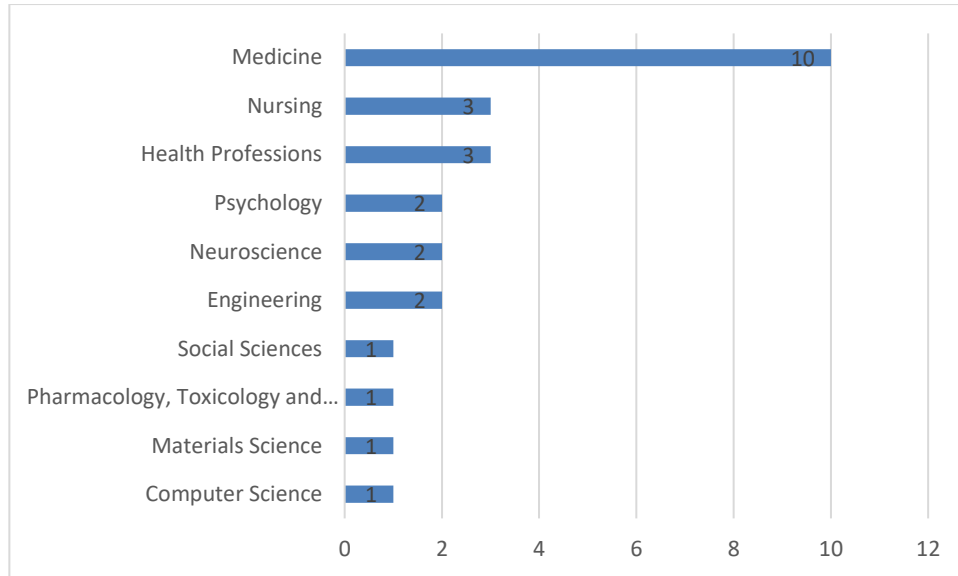


Figure 5. Distribution of scientific production by area of knowledge.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

Medicine was the area of knowledge with the highest number of publications registered in Scopus with a total of 10 documents that have been based on its Telemedicine, Innovation, and Family Medicine methodologies. In second place, Nursing with 3 articles and Health Professions in third place with 3. The above can be explained thanks to the contribution and study of different branches, the article with the greatest impact was registered by Medicine entitled "Telemedicine: the art of innovative technology in family medicine" This article describes the development and structure of the telemedicine curriculum of our family medicine residency program, first created in 2016 in response to the growing demand for this type of family medicine delivery model. health care. The history of telemedicine and what contributed to its growth is discussed. A timeline of the steps taken to create our new telemedicine residency curriculum is reviewed, along with the key components that contributed to its success. The Lessons Learned section provides other educators with information about the strengths and opportunities revealed during curriculum creation, and guidance on how the curriculum could be further improved.(Jenkins, 2022)

4.5 Type of publication

In the following graph, you will see the distribution of the bibliographic finding according to the type of publication made by each of the authors found in Scopus.

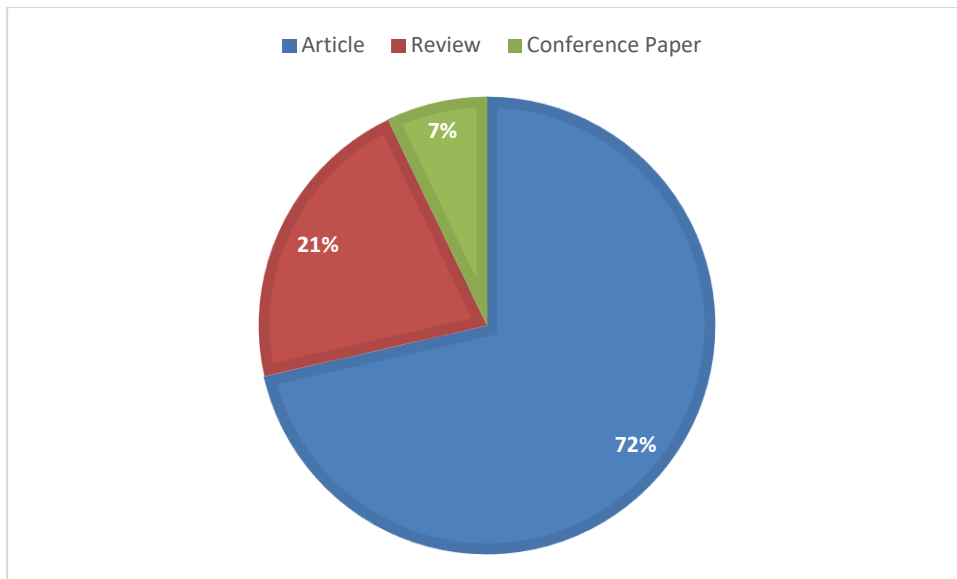


Figure 6. Type of publication.

Fountain: Authors' own elaboration (2023); based on data provided by Scopus.

The type of publication most frequently used by the researchers referenced in the body of this document was the one entitled Journal Articles with 72% of the total production identified for analysis, followed by Journal with 21%. Session Paper are part of this classification, representing 7% of the research papers published during the period 2017-2022, in journals indexed in Scopus. In this last category, the one entitled "Telemedicine from research to practice during the pandemic "instant document from the field" on rehabilitation responses to the COVID-19 emergency stands out" This article reports the contents of the third webinar of the Italian Society of Physical Medicine and Rehabilitation (SIMFER) on "field experiences" Impact of COVID-19 on rehabilitation ("Covinars"). It provides first-hand and readily available information on the application of telemedicine in rehabilitation. The experiences reported were very different in terms of population (number and health conditions), interventions, professionals, payment of services and technologies used. Commonalities included the urgent need due to the emergency, previous experiences, and a dynamic research and innovation environment. The lights included feasibility, results, reduction of isolation, reduction of costs, stimulation of innovation, satisfaction of patients, families and professionals beyond the initial mistrust. The shadows included that telemedicine can integrate but will never replace face-to-face rehabilitation based on the encounter between human beings; Age and technological barriers (absence of devices, poor connection, and human distrust) have also been reported. (Negrini, 2020)

5. Conclusions

Through the bibliometric analysis carried out in this research work, it was possible to establish that the United States was the country with the highest number of published records regarding the variables Telemedicine, Innovation, and Family Medicine. With a total of 7 publications in the Scopus database. In the same way, it was possible to establish that the application of theories framed in the area of Medicine, were used more frequently in the implementation of telemedicine for the well-being of immigrant communities. The dynamic nature of migration and people's diverse cultural backgrounds present unique challenges in healthcare delivery, making telemedicine a valuable tool for bridging gaps and improving accessibility to healthcare services. Telemedicine in family medicine has facilitated timely and convenient access to health care for migrants, overcoming geographical barriers and addressing challenges associated with cultural and

linguistic diversity. The implementation of virtual platforms allows healthcare providers to provide personalized care, taking into account the specific needs and cultural nuances of the migrant population. However, telemedicine has played a crucial role in preventive care, chronic disease management, and mental health support for migrants. One of the main benefits of implementing this consulting method is based on constant monitoring, which allows health professionals to monitor health indicators, make timely interventions, and offer psychological support, contributing to general well-being and reducing the burden on emergency services. The execution of telemedicine has not only improved outcomes by decreasing processes, reduced unnecessary hospital visits, and optimized resource allocation. health care, but has also improved the efficiency of health systems. Being able to reduce these rates is significant in multicultural environments since health professionals focus their medical care on being able to adapt to different patient profiles and different standards of medical care. However, it is essential to recognize that the successful implementation of telemedicine in family medicine for immigrants requires careful consideration of cultural competency, digital literacy, and ethical concerns. As technology continues to evolve, further research, collaboration, and policy development will be essential to realize the full potential of telemedicine in family medicine and continue to improve health outcomes for migrants around the world.

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