

ORIGINAL

## Scientific production of the Universidad Abierta Interamericana: Bibliometric analysis in the Scopus database

### Producción científica de la Universidad Abierta Interamericana: Análisis bibliométrico en la base de datos Scopus

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#### RESUMEN

**Introducción:** la tensión entre docencia e investigación en instituciones de educación superior surge de dos procesos distintos: la masificación del acceso a ella y el aumento de las expectativas sociales respecto de su investigación.

**métodos:** se realizó un estudio bibliométrico descriptivo a partir de la aplicación de un conjunto de indicadores. Se incluyeron los documentos indexados en la base de datos Scopus publicados entre el 2012 y el 2021, independientemente del tipo.

**Resultados:** Los resultados del análisis de los 336 documentos, que representan el total de la producción científica de la Universidad Abierta Interamericana en el período de 2012 a 2021, revelan un crecimiento significativo en la producción académica, con un incremento del 336 %. La Universidad Abierta Interamericana ha demostrado una amplia producción científica en diversas áreas temáticas según la categorización en Scopus. Destaca especialmente en Medicina, con 158 documentos publicados, lo que representa el 47 % del total de documentos de la universidad. El 27,7 % de los documentos se han realizado en colaboración internacional, lo que demuestra la participación activa de la universidad en redes de investigación a nivel global.

**Conclusión:** la Universidad Abierta Interamericana ha experimentado un notable crecimiento en su producción científica durante el período estudiado, reflejando su compromiso continuo con la investigación y el avance del conocimiento. Estos hallazgos destacan su compromiso con la generación y difusión del conocimiento, así como la importancia de la colaboración y el impacto de las investigaciones en la comunidad científica.

**Palabras Clave:** Producción científica; Universidad; Bibliometría; Scopus.

#### ABSTRACT

**Background:** the tension between teaching and research in higher education institutions arises from two different processes: the massification of access to it and the increase in social expectations regarding its research.

**Methods:** a descriptive bibliometric study was conducted based on the application of a set of indicators. Documents indexed in the Scopus database published between 2012 and 2021 were included, regardless of type.

**Results:** the results of the analysis of the 336 documents, which represent the total scientific production of the Inter-American Open University in the period from 2012 to 2021, reveal a significant growth in academic production, with an increase of 336 %. The Inter-American Open University has demonstrated a wide scientific production in various thematic areas according to the categorization in Scopus. It stands out especially in Medicine, with 158 published documents, which represents 47 % of the total number of documents of the university. 27,7 % of the documents have been produced in international collaboration, which demonstrates

the active participation of the university in research networks at a global level.

**Conclusion:** the Inter-American Open University has experienced a remarkable growth in its scientific production during the period studied, reflecting its continued commitment to research and the advancement of knowledge. These findings highlight its commitment to the generation and dissemination of knowledge, as well as the importance of collaboration and the impact of research on the scientific community.

**Keywords:** Scientific production; University; Bibliometrics; Scopus.

## INTRODUCTION

The tension between teaching and research in higher education institutions arises from two distinct processes: the massification of access to education and the increased social expectations regarding research. Both processes manifest in the ways in which higher education institutions acquire resources and, through that, organize their activities, structures, hierarchies, rewards, and missions, among other factors.<sup>(1)</sup>

Scientific knowledge production is considered strategic for the purposes of development and a key instrument for redefining social relationships in terms of economic growth and social inclusion. Knowledge-based economies make innovation their main source of legitimacy. Therefore, both explicit knowledge developed through formal or informal research and development, as well as tacit knowledge, i.e., socially relevant knowledge for solving specific problems, are valued.<sup>(2)</sup>

A study suggests that factors predisposing to increased scientific production in universities include the characteristics of the authors. In the case of students, collaborative authorship, student age, and research design have been identified as factors that increase the likelihood of publication. For university professors, factors associated with increased publication probability include being under 40 years old, being a professor at a university that requires mandatory theses, and working in a highly competitive university.<sup>(3)</sup>

New knowledge resulting from scientific research acquires value when it is published and subsequently applied in specific fields, contributing to societal development. By applying bibliometric techniques, a global overview of the performance and impact of scientific activity in a particular region can be obtained. This objective data serves as a point of comparison for measuring differences in productivity among different scientific specialties or institutions and their contribution to development. Consequently, it facilitates decision-making when establishing policies, allocating resources to research lines, researchers' choice of high-impact journals to publish their studies, and support for low-productivity specialties.<sup>(4)</sup>

Research requires policies that help define lines of work and promote knowledge production in areas of interest to states.<sup>(5)</sup> To achieve this, scientific collaboration is fundamental, involving the interaction of researchers to exchange skills, competencies, or resources, leading to superior results compared to individual work.<sup>(6,7)</sup>

Scientific research and its subsequent publication have increased in recent years, both in terms of articles and the number of scientific journals. This growth, influenced by the ease of computer communication, has been extensively leveraged by various groups that have developed and consolidated their positions as sources of knowledge and scientific reference in various areas.<sup>(8)</sup>

A first step in improving global research capacity is to better understand trends in research publications in the field. There is insufficient knowledge of scientific production about the Universidad Abierta Interamericana from the perspective of its quantity, evolution, specialization, performance, scientific collaboration, and its position in the international context. There is also a lack of useful bibliometric information for managing scientific activity and improving the quality of scientific publication from an editorial perspective.

The use of research results in the implementation of educational policies has a significant trajectory and currently holds special relevance for the Latin American context. To make informed decisions, it is necessary to develop a clear diagnosis of the situation, with a particular emphasis on analyzing the situation of the Universidad Abierta Interamericana. This includes considering the process of knowledge production, dissemination, and utilization, its structure, dynamics, and conditioning factors. Currently, there is no bibliometric study on the topic that offers a comprehensive and updated view beyond the quantitative perspective, encompassing quantitative, qualitative, and production, collaboration, and impact dimensions.

**Objective:** to describe the scientific production of the Universidad Abierta Interamericana in Scopus.

## METHODS

A descriptive bibliometric study was conducted using a set of indicators. It is a quantitative research that analyzes bibliographic data provided by recognized secondary sources through the counting, ordering, and classification of the obtained data.

This study is descriptive as it examines the characteristics and distribution of a phenomenon at a specific

moment, in this case, the behavior of scientific publications. Although commonly studied factors such as environment, disease, mortality, morbidity, etc., are not present in bibliometric studies, factors influencing productivity (quantity), visibility (indexing), and scientific impact (citations) are analyzed. These factors are studied not at the level of individual articles but as a whole according to levels of aggregation (authors, institutions, regions, countries). Bibliometric studies allow for the measurement of knowledge production in a specific area or region.

The documents indexed in the Scopus database published between 2012 and 2021 were included in the sample. The sample will consist of scientific articles regardless of type. The bibliometric tool SciVal was used for data analysis, and bibliometric indicators were calculated depending on the database used. The data and results were recorded in a Microsoft Excel spreadsheet.

Co-occurrence matrices for analyzing social networks among countries and terms will be developed using the programs Bibexcel and VOSviewer 1.6.15 (<https://www.vosviewer.com/>) to visualize the relationships within these networks. Normalization of university fields and keywords was performed, specifically for keywords, terms with a frequency of occurrence equal to or greater than 100 were considered.

## RESULTS

The results of the analysis of the 336 documents, which represent the total scientific production of the Universidad Abierta Interamericana from 2012 to 2021, reveal a significant growth in academic output, with a 336 % increase. Additionally, it is noteworthy that 44 % of the publications are open access, demonstrating the university's commitment to dissemination and access to research.

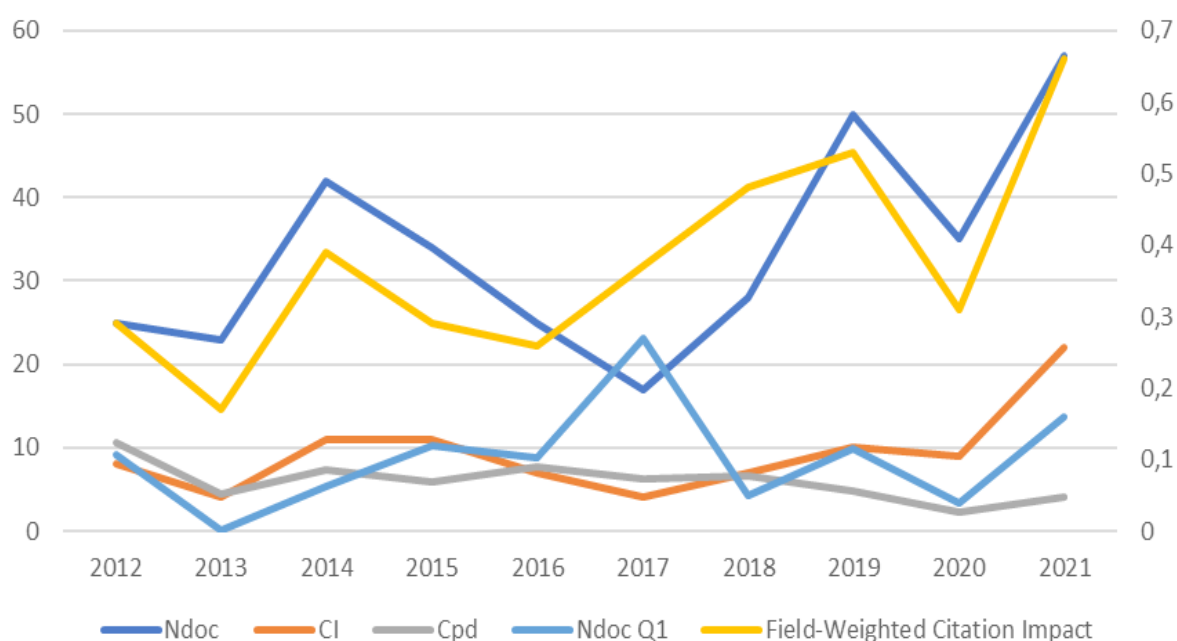
Regarding the authors, there is a 299 % increase, indicating greater participation of researchers in knowledge generation. This highlights collaboration and the exchange of ideas in the academic field.

The Field-Weighted Citation Impact (FWCI) shows a value of 0,41, indicating a moderate impact of the publications in the scientific community. This indicator evaluates the quality and influence of the documents, which is relevant for assessing the impact and importance of the research conducted.

Regarding citations, a total of 1912 citations are recorded in the analyzed period, with an average of 5,7 citations per publication. This suggests that the conducted research has generated interest and recognition in the scientific community, which is a positive indicator of its contribution to knowledge.

Furthermore, the h5-index shows a value of 10, indicating that at least 10 of the publications have been cited at least 10 times. This suggests that some of the conducted research has had a significant impact in the academic field.

These results demonstrate the remarkable growth in academic output, author participation, and the impact of publications from the Universidad Abierta Interamericana in the scientific community during the period from 2012 to 2021.



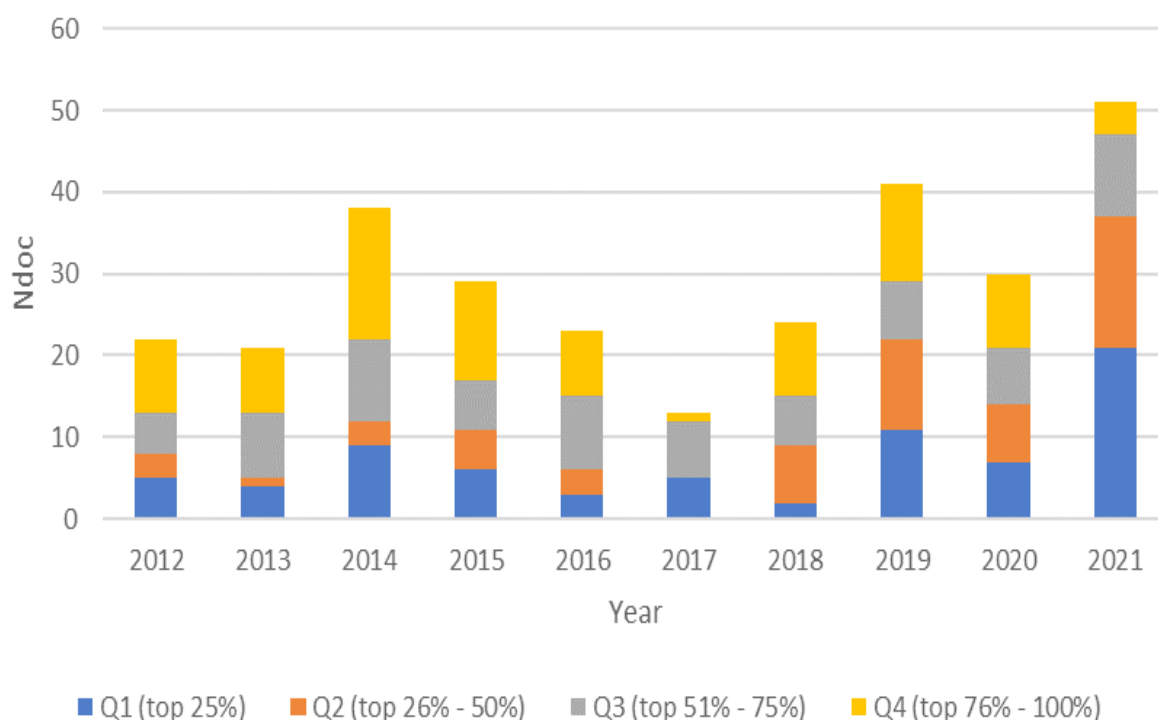
Graph 1. Distribution of bibliometric indicators by year

The Universidad Abierta Interamericana has experienced consistent growth in its scientific production during the analyzed period. There is a progressive increase in the number of documents published in Scopus, rising from 25 in 2012 to 57 in 2021. This increase demonstrates a continuous commitment to research and the advancement of knowledge.

Regarding the impact of these publications, it can be observed that the Field-Weighted Citation Impact (FWCI) remains within a moderate range throughout the years. This indicator, which assesses the quality and influence of the documents, shows values ranging from 0,17 in 2013 to 0,66 in 2021. Although there is some annual variability, overall, the university has managed to maintain an acceptable level of impact in the scientific community.

In terms of scientific collaboration, there is a noticeable increase in the number of co-authored documents, indicating greater participation in research networks and teamwork. This aspect is crucial for promoting interdisciplinary collaboration and knowledge exchange.

However, it is important to mention that fluctuations in the performance of the indicators are observed throughout the studied period. Some years show more prominent performance than others, which could be related to factors such as resource availability, prioritization of research areas, or the involvement of high-impact researchers. These results highlight the importance of continuing to promote research and scientific development at the Universidad Abierta Interamericana to maintain an upward trajectory in terms of production and scientific quality.



**Graph 2.** Distribution of resources according to quartile by year

The results show the distribution of scientific production from the Universidad Abierta Interamericana in Scopus according to the quartile of the journals in which they were published. It can be observed that over the years, there has been a consistent increase in the number of documents published in high-impact journals, belonging to the first quartile (Q1) representing the top 25 % of journals with the highest impact.

In 2012, 5 documents were published in Q1 journals, and this number progressively increased in the following years, reaching a peak of 11 documents in 2019. However, in 2021, there is a slight decrease with 21 documents published in Q1 journals.

As for the second quartile (Q2), which comprises the 26 % to 50 % of journals with the highest impact, significant publications are also recorded. Although the number of documents published in Q2 journals has varied over the years, there is an increase in 2018 and 2019, with 11 documents in both categories.

Furthermore, the university has achieved a notable presence in higher-impact journals, as the total number of documents published in Q1 and Q2 journals (representing the top 50 % of journals) amounts to 129 in total.

**Table 1.** Indicators according to thematic categories

Subject Area	Ndoc	%Ndoc	Ncit	Cpd	Authors	FWCI
Medicine	158	47,0 %	1000	6,3	175	0,47
Psychology	68	20,2 %	408	6	40	0,35
Biochemistry, Genetics and Molecular Biology	53	15,8 %	662	12,5	43	0,61
Neuroscience	44	13,1 %	253	5,8	34	0,39
Social Sciences	34	10,1 %	128	3,8	44	0,39
Computer Science	33	9,8 %	30	0,9	48	0,3
Immunology and Microbiology	17	5,1 %	166	9,8	23	0,68
Pharmacology, Toxicology and Pharmaceutics	12	3,6 %	65	5,4	13	0,44
Agricultural and Biological Sciences	11	3,3 %	79	7,2	19	0,39
Engineering	11	3,3 %	29	2,6	17	0,33
Mathematics	11	3,3 %	8	0,7	19	0,24
Environmental Science	10	3,0 %	78	7,8	15	0,49
Arts and Humanities	7	2,1 %	28	4	7	0,27
Multidisciplinary	6	1,8 %	64	10,7	12	0,43
Nursing	6	1,8 %	6	1	9	0,06
Physics and Astronomy	6	1,8 %	12	2	11	0,1
Veterinary	4	1,2 %	24	6	8	0,83
Health Professions	4	1,2 %	11	2,8	4	0,24
Chemical Engineering	3	0,9 %	0	0	7	0
Decision Sciences	3	0,9 %	5	1,7	9	0,83
Economics, Econometrics and Finance	3	0,9 %	16	5,3	4	0,41
Energy	3	0,9 %	0	0	7	0
Business, Management and Accounting	1	0,3 %	0	0	2	0
Earth and Planetary Sciences	1	0,3 %	16	16	1	0,45

The Universidad Abierta Interamericana has demonstrated a significant scientific production in various thematic areas according to the categorization in Scopus. It stands out particularly in Medicine, with 158 published documents, representing 47 % of the university's total documents. Additionally, there is a significant number of publications in Psychology (n=68), Biochemistry, Genetics, and Molecular Biology (n=53), and Neuroscience (n=44).

In terms of received citations, the fields of Biochemistry, Genetics, and Molecular Biology lead with 662 citations, followed by Medicine with 1000 citations. These results reflect the impact and relevance of the research conducted in these fields. Furthermore, areas such as Computer Science, Immunology and Microbiology, and Environmental Science have also obtained a considerable number of citations.

The Field-Weighted Citation Impact (FWCI) shows variable performance in different thematic areas. Disciplines like Veterinary Science, Immunology and Microbiology, and Biochemistry, Genetics, and Molecular Biology have FWCI values exceeding 0,6, indicating a significant impact in the scientific community. However, other areas such as Economics, Arts and Humanities, and Physics and Astronomy show lower FWCI values.

**Table 2.** Type of collaboration

Type of collaboration	%	Ndoc	Ncit	Cpd	FWCI
International collaboration	27,7 %	93	960	10,3	0,73
Only national collaboration	45,8 %	154	714	4,6	0,34
Only institutional collaboration	15,5 %	52	171	3,3	0,23
No collaboration	11,0 %	37	67	1,8	0,16

The results show a diversity in the types of scientific collaboration in the academic production of the Universidad Abierta Interamericana in Scopus. It is observed that 27,7 % of the documents have been carried





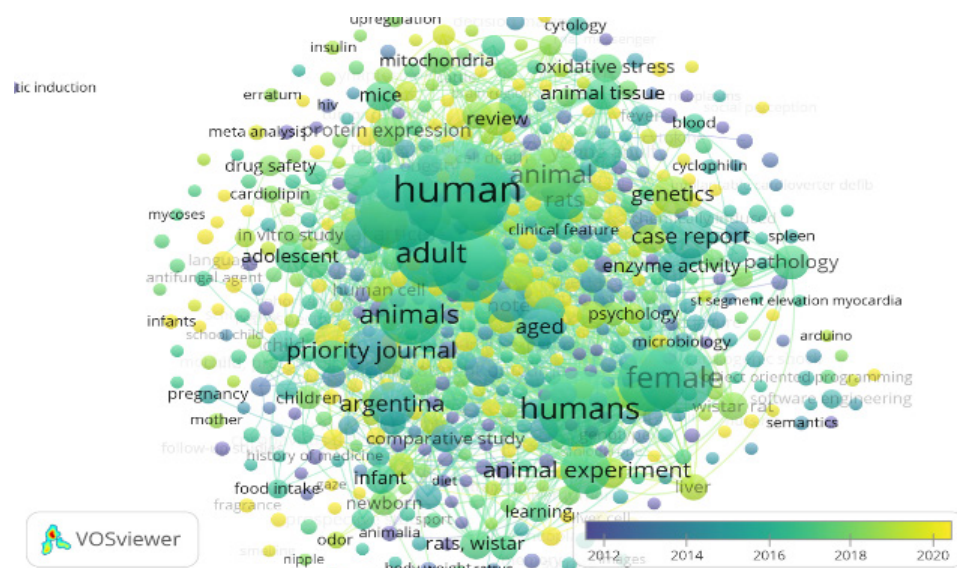
The co-occurrence analysis of terms (Graph 5 and 6) reveals interesting patterns in the scientific production of the Universidad Abierta Interamericana. The most frequent terms cluster into different clusters, indicating specific thematic areas of research.

The first cluster, represented by terms such as "human," "male," "adult," and "middle-aged," is related to studies involving the general human population. These terms indicate a focus on research centered around the behavior, health, and demographic characteristics of human beings.

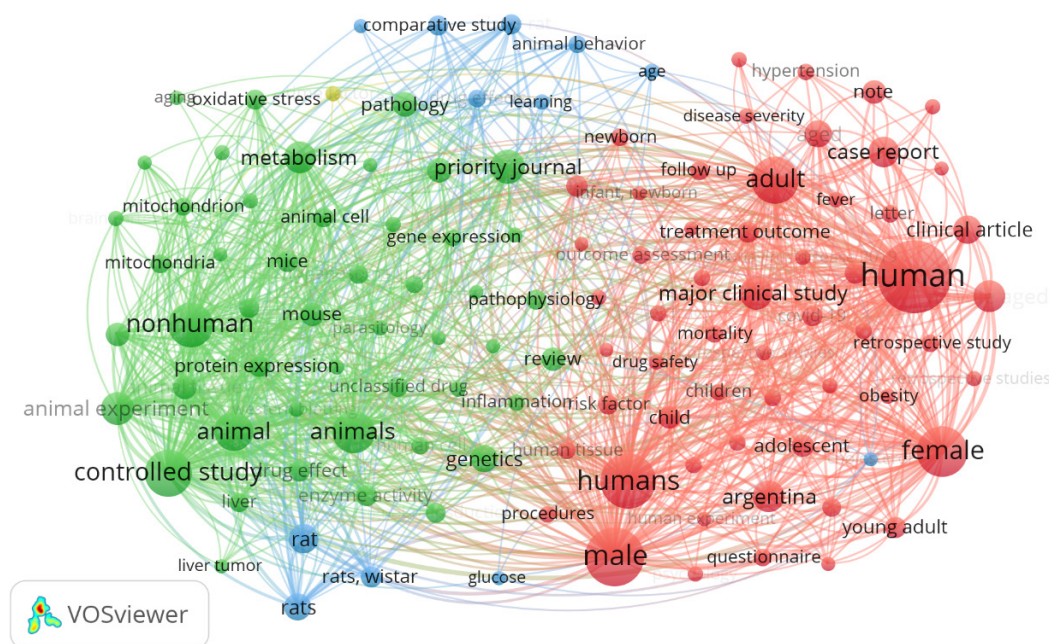
The second cluster focuses on animal research, as reflected in terms like "humans," "female," "nonhuman," "animals," and "animal experiment." These terms suggest the conduct of studies involving animal models to understand physiology, pathology, and the effects of treatments.

The third cluster, which includes terms like "genetics," "pathology," "physiology," and "cell proliferation," indicates a focus on molecular and cellular research. This suggests that the university is engaged in studies exploring the genetic basis of diseases, underlying cellular mechanisms, and protein expression.

Other clusters encompass thematic areas such as clinical research, represented by terms like "priority journal," "major clinical study," "case report," and "clinical article," as well as specific areas of research like microbiology, psychology, epidemiology, and pharmacology.



Graph 5. Overlay Visualization



Graph 6. Term co-occurrence networks

## DISCUSSION

The results obtained in this study reveal a remarkable growth in the scientific production of the Inter-American Open University during the period from 2012 to 2021. The 336 % increase in academic production reflects the university's commitment and effort to promote research and the advancement of knowledge. These findings are consistent with previous studies that have highlighted the sustained growth of scientific production in higher education institutions.

Comparing the results of this study with similar research conducted at other universities, it can be observed that the Inter-American Open University shows favorable performance in terms of growth and scientific production. For example, an article<sup>(9)</sup> examines the issues affecting knowledge production in Latin America, with a focus on universities as the principal regional producers of knowledge. It compares changes and continuities concerning academic values and attitudes, governmental policies, university-industry relations, and endogenous knowledge generation. The article also analyzes the connection between the National Systems of Innovation (NSI) in Latin America and the social "loneliness" of universities. The paper concludes by sketching alternative scenarios for the future interaction between knowledge generation and university transformation. Therefore, the paper provides an in-depth analysis of the current state of knowledge production in Latin American universities and suggests possible ways to improve it.

The practical implications of Arocena and Sutz paper are that it provides insights into the challenges and opportunities for knowledge production in Latin American universities. The analysis of academic values and attitudes, governmental policies, university-industry relations, and endogenous knowledge generation can help policymakers and university administrators to identify areas for improvement. The paper also highlights the importance of strengthening the National Systems of Innovation (NSI) in Latin America to support knowledge production. The alternative scenarios presented in the paper can serve as a starting point for discussions on how to transform universities to better meet the needs of society. Overall, the paper can inform decision-making processes aimed at improving the quality and relevance of knowledge production in Latin American universities.

In the university context, research has an impact through processes of production, knowledge transmission, and research guidance to evaluate and compare research strategies through its instruments.<sup>(10)</sup> Science, training, academic development, and capacity building are essential in university education.

Academic science and socioeconomic development are increasingly intertwined, and this complexity reveals a variety of motivations, interests, structures, interactions, and values that give rise to diverse institutional configurations and relationships among actors.

National universities promote research within a dynamic, situational, and pragmatic framework using diverse logics. There is a gradual increase in publications, which is indicative of the gradual development achieved. Contributions, often from international centers, increase critical mass through the development of research networks, obtaining scholarships, and practice in article publication. This incentive, in turn, can help train universities across the country to conduct more research so that trained personnel can address health and development problems in the country, as well as stimulate students to become leaders and agents of change.<sup>(2)</sup>

Pinto et al.<sup>(11)</sup> presents the results of using bibliometric analysis and information visualization techniques on the corpus of Ibero-American IL literature. The total number of unique IL documents retrieved for the period 1985-2013 was 340. The year with the greatest production was 2011, with 59 documents. From 2005 until 2011, there was exponential growth in production, with an annual growth rate close to 30 %. The paper has several practical implications for researchers, academics, and information professionals in the Ibero-American context. Some of these implications are:

- The need for bibliometric studies of the scientific literature on IL in the Ibero-American context to be conducted periodically.
- Monitoring the emerging trends in research and collaboration in this area, and to see which authors and journals are the most productive.
- Promoting the transferability of IL between disciplines so that it will naturally permeate the different areas of knowledge.
- Fostering collaborative developments between the different information units and the educational organizations that are leading this university level training.
- Disseminating literacy practices in the remaining types of information unit (public libraries, school libraries, etc.)

These implications can help improve the quality of IL research and education in the Ibero-American context and promote collaboration and knowledge sharing among researchers and practitioners.

The analysis of bibliometric indicators, such as the Field-Weighted Citation Impact (FWCI), reveals a moderate impact of the university's publications in the scientific community. Although the FWCI varies depending on thematic areas, it is important to consider that it falls within an acceptable range in relation to previous studies conducted in similar institutions. These findings highlight the importance of continuing to promote



the quality and influence of publications through the selection of high-impact journals and the promotion of interdisciplinary collaboration.<sup>(12,13,14)</sup>

It is necessary to highlight the implications of these results for both the university and the scientific community in general. The growth in academic production and author participation demonstrate a conducive environment for research and knowledge generation at the Inter-American Open University. This increase in scientific production contributes to the development of the institution, strengthening its reputation and its ability to attract academic talent.<sup>(15)</sup>

In Argentina, science and technology are constantly growing and developing. The production of scientific knowledge is seen as a key instrument for redefining social relationships and achieving economic growth and social inclusion in recent decades. Knowledge-based economies legitimize innovation as their main source.<sup>(16,17)</sup>

Furthermore, the increase in scientific collaboration, both at the national and international levels, reflects the spirit of knowledge exchange and the importance of establishing strategic alliances. Participation in research networks and collaboration with other institutions strengthen the quality and relevance of the research conducted, allowing for the addressing of complex problems from multiple perspectives and generating a significant impact in the academic field.

The aim is to generate knowledge that is inter, multi, and/or transdisciplinary.

The adoption of priority areas for scientific research in Argentina indicates a better distribution towards different areas through promotions focused on partnerships with national universities. New institutions with few researchers and a less complex scientific sector tend to adopt a broader and multidisciplinary strategy to bring together different lines of research.<sup>(18)</sup>

Centralized and active research management favors the definition of priority areas, the implementation of financing instruments through specific calls, and the planning of sector policy at the university.<sup>(19,20,21)</sup>

Research in Argentina seeks to promote analysis and understanding in Higher Education of MERCOSUR regarding integration, stimulate exploration on this topic, and present proposals for the improvement of public policies in higher education of MERCOSUR.<sup>(22,23,24,25)</sup>

Co-authorship evidences cooperation and connections among researchers, allowing for the distinction between those who work in scientific collaboration and those who work independently. Collaborative networks facilitate group research and scientific collaboration to develop and measure shared knowledge.<sup>(26,27)</sup>

It has been found that collaborative authorship, student age, and research design are factors that increase the likelihood of publication with respect to the publication of scientific articles by students. Having a supervisor who has published works and having done a thesis during the career are interesting aspects for carrying out a research project.

The importance of higher education comes from the deliberate and systematic combination of teaching and research to promote scientific thinking and generate knowledge within legal structures.<sup>(28,29,30,31)</sup>

The integration of teachers into scientific-research training requires their participation in formal mechanisms and processes, which demands conscious commitment. The construction of scientific knowledge and the development of research skills must be dialectically integrated. Integration is achieved through training and research initiatives that incorporate didactic techniques and consider contextualized variants of undergraduate education.<sup>(3,32,33,34)</sup>

University collaboration contributes to creating policies and lines of research in higher education in MERCOSUR. These contributions cover an information need in Argentina and will be a reference for future debates and research. As a result, integration activities will advance, and their scientific findings will be enhanced.<sup>(19,35)</sup>

In this regard, Carvajal-Tapia et al.<sup>(36)</sup> findings have a number of practical implications:

- The paper highlights the need to create scientific research networks in South America and the economic blocs by identifying and bringing together academic instances, collegial groups, and scientific associations of undergraduate students to promote and support those countries whose volumes of scientific production are currently low.

- Strategic alliances of research groups should be established in each country and between countries with less developed scientific production activities in the field of Medicine.

- Medical schools in countries with low levels of scientific production should implement subjects such as research methodology, statistics, research ethics, scientific writing, and publication or related policies to deepen and achieve greater knowledge regarding the use of tools that are necessary to keep a constant line of research.

- The paper also suggests that countries with low levels of scientific production can benefit from collaborating with countries with higher levels of scientific production to improve their research output.

- The findings of this paper can be used by policymakers and funding agencies to allocate resources and support research activities in countries with low levels of scientific production in medicine.

Overall, the paper provides insights into the current state of scientific production in medicine in South

America and highlights the need for collaborative efforts to improve research output in the region.

This study highlights the significant growth in the scientific production of the Inter-American Open University, as well as the moderate impact of its publications in the scientific community. These results demonstrate the university's commitment to knowledge generation and dissemination. However, it is necessary to continue strengthening publication strategies, scientific collaboration, and the promotion of research quality to increase impact and relevance in the academic field.

### Limitations of the study

Despite the achievements and observed growth, it is also important to highlight the limitations and challenges identified in this study. Fluctuations in the performance of indicators throughout the studied period suggest the existence of external factors that can affect scientific production and quality. Factors such as resource availability, competition in the research field, and lack of investment in certain thematic areas can influence the obtained results.<sup>(37,38)</sup>

It is necessary to note that the comparison of bibliometric indicators may have limitations, as they do not capture the full impact and relevance of research. Other factors, such as knowledge transfer to society, application of research in solving real problems, and generation of innovation, are important aspects that can enrich the evaluation of the impact of scientific production.

### CONCLUSIONS

The Universidad Abierta Interamericana has experienced a remarkable growth in its scientific production during the period from 2012 to 2021, reflecting its continuous commitment to research and the advancement of knowledge. During this time, there has been a 336 % increase in the number of published documents, demonstrating significant growth in knowledge generation.

A noteworthy aspect is the practice of open access, as 44 % of the publications are open access. This reflects the institution's commitment to the dissemination and broad access to research, thereby fostering collaboration and the exchange of ideas in the academic field.

The impact of the publications from Universidad Abierta Interamericana shows a moderate impact in the scientific community. This indicates that the research conducted has a certain quality and is influencing the academic field.

In terms of the consumption of the science produced, the published research has generated interest and recognition in the scientific community, which is a positive indicator of its contribution to knowledge.

Regarding thematic areas, the Universidad Abierta Interamericana has demonstrated a wide scientific production in various fields. The discipline of Medicine stands out with nearly half of the scientific production, followed by areas such as Psychology, Biochemistry, Genetics and Molecular Biology, and Neuroscience.

Scientific collaboration has been diverse, with approximately one-third of the papers being done in international collaboration, and only 10 % without collaboration. This demonstrates the active participation of the university in research networks at a global level, as well as the importance of collaboration at the national and internal levels.

The results of the study show the significant growth and relevance of the scientific production of the Universidad Abierta Interamericana in Scopus. These findings highlight its commitment to knowledge generation and dissemination, as well as the importance of collaboration and the impact of research in the scientific community.

These results showcase the notable progress of the Universidad Abierta Interamericana in its scientific production, underscoring the importance of continuing to foster research and promoting collaboration at both the national and international levels. Additionally, it is suggested to continue working on improving the quality and impact of research, as well as diversifying the addressed thematic areas. This way, the university can further strengthen its position as a prominent academic institution in the scientific field.

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