Executive Report

IX Session of the Advisory Committee of BIREME

December 17, 2020

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Summary

The Latin American and Caribbean Center on Health Sciences Information (BIREME/PAHO/WHO) was established in São Paulo, Brazil in 1967 as the Regional Library of Medicine by means of an Agreement between the Government of Brazil and the Pan American Health Organization, with a technical cooperation model based on the essential functions of a medical library. Since 1982, the denomination changed to reflect the expansion of the technical cooperation model, including the outstanding role of providing regional and international visibility to scientific and technical health output in Latin America and the Caribbean (LA&C).

BIREME is one of the three specialized PAHO/WHO centers, besides PANAFTOSA (Pan American Foot-and-Mouth Disease Center) and CLAP (Latin American Center for Perinatology, Women's and Reproductive Health). Its has a regional nature and the work it carries out is at the service of LA&C.

On March 3, 2020, BIREME celebrated 53 years of uninterrupted work with the mission of contributing to strengthen health systems and services in Latin American and Caribbean countries by means of the democratization of access, publication and use of the information, knowledge and scientific evidence in convergence with national and regional strategies of the 2030 Agenda and Universal Health Coverage.

BIREME conducts its initiatives, projects, products and services by means of following lines of actions involving more than one thousand academic and governmental libraries and over two thousand health institutions.

Increasing the visibility of the scientific health output in LA&C countries by promoting the registry and indexing of their scientific and technical literature in regional, national and international databases, adopting Open Access strategies, collect data to assess scholarly communication in health, and developing web technologies and interfaces for information search and retrieval.

Developing capacity to make evidence-informed decisions in health, such as training activities on the access and use of evidence to guide policy and decision making in health, scholarly communication, and implementing instructional design for online learning courses integrated to the Virtual Campus of Public Health (CVSP, from the acronym in Spanish).

Developing and implementing knowledge management activities to strengthen national health policies and strategies by improving the institutions' capacity on knowledge management; developing information products and services designed to facilitate the information access and knowledge application in order to meet the strategic priorities and health objectives.

Applying knowledge discovery process to extract potentially useful information and generate indicators on health scientific and technical literature from data available in the Virtual Health Library (VHL) information sources.

Moreover, **developing Knowledge Translation products and services** to bridge the research-to-practice-gaps by means of special services on search, analysis, synthesis and application of scientific knowledge to support health decision-making processes and helping to reduce the so-called "know-do-gap".

And equally important, **implementing Knowledge Platforms to integrate and manage research data** ease measurement and analysis of research activity and facilitate the access to comparative information on the countries' priority health issues.

Below lies a summary of the aspects related to the institutionality, governance, financial sustainability, and main achievements of BIREME in 2020, as well as a description of its products and services for the Center's technical cooperation.

1 Institutionality

1.1 Status of the Center

At the 58th Directing Council of PAHO/WHO, the 72nd Session of the Regional Committee of the World Health Organization for the Americas, held in virtual session, on September 28th and 29th, 2020, there was no presentation of the usual document on the situation of the Pan American Centers. However, BIREME was cited in the Annual Report of the Director of the Pan American Sanitary Bureau (CD58/3) and in document CD58/16 there was the Election of two Member States to integrate the Advisory Committee of the Latin American and Caribbean Center on Health Sciences Information (BIREME).

1.2 Governance

The resolution of PAHO's Directing Council (CD49.R5) established the structure of the new legal framework constituted by the Statute of BIREME, which is under implementation pending the Headquarters Agreement of BIREME in Brazil, to be established between PAHO and the Brazilian Government.

The Statute of BIREME also determines the new structure of governance of BIREME, with the following composition:

A) BIREME Members defined in the categories: a) Member States: all Member States, Participating States, and PAHO Associated Members; b) Participating States: the WHO Member States besides those that are PAHO Members; and c) Participating Organizations: public international organizations with specific qualification related to information and scientific and technical communication. The participation of new members shall be defined by PAHO;

B) Advisory Committee: permanent body of BIREME formed by PAHO and the Government of Brazil as permanent members and by five of BIREME Members as non-permanent members. The non-permanent members were elected as following:

▪ At the 58th Directing Council (CD58.R6): Colombia and Costa Rica for a three-year mandate (2021-2023);

- At the 56th Directing Council (CD56.R4): Guyana, México and Uruguay for a three-year mandate (2019-2021);
- At the 29th Pan American Sanitary Conference (CSP29R9): Barbados and El Salvador for a three-year mandate (2018-2020);
- At the 54th PAHO Directing Council (CD54.R5): Argentina, Jamaica and Peru for a three-year mandate (2016-2018);
- At the 53rd PAHO Directing Council (CD53.R5): Panama and Trinidad and Tobago for a three-year mandate (2015-2017);
- At the 28th PAHO Pan American Sanitary Conference (CSP28.R5): Cuba, Ecuador, and Puerto Rico for a three-year mandate (2013-2015);
- At the 51st PAHO Directing Council (CD51.R2): Bolivia and Suriname for a three-year mandate (2012-2014);
- At the 49th PAHO Directing Council (CD49.R6): Argentina, Chile, and the Dominican Republic for a three-year mandate (2010-2012) and Jamaica and Mexico for a two-year mandate (2010-2011).

The role of this Committee is to make recommendations to the Director of PAHO on the programming functions, the working plan and the financing of BIREME.

Eight sessions of the Advisory Committee (AC) occurred in compliance with the implementation of the new institutional framework of BIREME, following Resolution 5 of the 49th PAHO/WHO Directing Council (CD49.R5). The VIII Session occurred on October 24th and 25th, 2019. An ad-hoc session occurred on July 30th, 2020.

Next, information about the dates and participants:

Session	Date	Location	Participants
Ad-Hoc	July 30th 2020	Online	OPS/OMS (EIH. BIR) Países (Brasil, Barbados, El Salvador, Guyana y Uruguay)
VIII AC	October 24th-25th 2019	BIREME	PAHO Countries (**Brazil**, Barbados, El Salvador, Guyana, México, Uruguay)
VII AC	November 7th-8th 2018	BIREME	PAHO (EIH a.i., PWR Brazil, BIR) Countries (Brazil, **Argentina**, Barbados, El Salvador, Jamaica, Peru)

VI AC	February 2nd 2017	BIREME	PAHO (AD, KBR, BIR) Countries (Argentina, Jamaica, Panama, **Peru**, Trinidad and Tobago)
V AC	December 3rd 2014	BIREME	PAHO (AD, KBR, BIR) Countries (**Cuba**, Ecuador)
IV AC	November 26th 2013	BIREME	PAHO (KMC, BIR) Countries (**Brazil**, Bolivia, Cuba, Ecuador, Puerto Rico)
III AC	December 5th 2012	BIREME	PAHO (KMC, BIR) Countries (Argentina, **Brazil**, Bolivia, Chile, Dominican Republic, Suriname)
II AC	October 25th 2011	BIREME	PAHO (KMC, PWR/BRA, BIR) Countries (Argentina, **Brazil**, Chile, Dominican Republic)
I AC	August 31st 2010	PAHO/HQ	PAHO (D, AD, DD, AM, KMC, LEG, PWR/BRA, BIR) Countries (Argentina, **Brazil**, Chile, Dominican Republic, Jamaica, México)

Note: Country in bold indicates the Chair of the Session

C) Scientific Committee: Permanent body of BIREME formed by at least five scientific information specialists appointed by the Advisory Committee of BIREME. Its function is helping to maintain and improve BIREME's capacity to follow the development of methodologies, technologies, products, services, and events that characterize the national and international systems of information and scientific communication and the challenges for their contextualization in the LA&C. The process of indication of its members by the national authorities, appraisal, and nomination of members of the Scientific Committee was concluded in December 5th, 2012, in the III Session of the Advisory Committee. The four members named were indicated by Canada, Honduras, Trinidad and Tobago and Brazil and, a fifth member from the National Library of Medicine of United States. In the VI Session of the Advisory Committee, new members of the Scientific Committee were selected for their professional characteristics related to Scientific Communication, Research, Information Management, Education and Knowledge Management and Information Technology for 3 years term and could be renovated for another 3 years.

Five sessions of the Scientific Committee (SC) were held. The fifth session took place on November 28th and 29th, 2019 when, from the selection and appointment by the members of the AC, the members who will act in the mandate in the years 2020-2022 were confirmed. An Ad-Hoc session for the presentation and meeting of the new members of the Scientific Committee was held on August 28, 2020.

Next, information about the dates and participants:

Session	Date	Location	Participants
Ad-Hoc	August 28, 2020	Online	PAHO/WHO (EIH. BIR) Countries (Brazil, Argentina, México and United States) Note: The specialists from Holland and Peru justified their absence.
V SC	November 28th-29th 2019	BIREME	PAHO (BIR) Countries (Brazil, México, Jamaica, Colombia, Cuba and Costa Rica. Note: The specialists from Jamaica justified her absence.
IV SC	December 3rd, 2018	BIREME	PAHO (EIH a.i., BIR) Countries (Brazil, **México**, Jamaica, Colombia, Cuba and Costa Rica)
III SC	December 8th, 2017	BIREME	PAHO (AD, KBR, BIR) Mexico, Jamaica, **Cuba**, Colombia, Costa Rica and Brazil
II SC	August 14th 2014	BIREME	PAHO (AD, KBR, BIR) Countries (Brazil, **Honduras**, Trinidad and Tobago, National Library of Medicine (USA)
I SC	July 25th 2013	BIREME	PAHO (AM, KMC, BIR) Countries (**Brazil**, Canada, Honduras, Trinidad and Tobago, National Library of Medicine (USA)

Note: Country in bold indicates the Chair of the Session

D) Secretariat: permanent organ of BIREME, formed by the Director and the technical and administrative teams of the Center, with 40 collaborators. It is responsible for the management and execution of the programming functions of BIREME's biennial work plan 2020-2021 that was developed in coordination with the PAHO/WHO Department of Evidence and Intelligence for Action in Health (EIH).

2 Biennial Work Plan (BWP)

BIREME's Biennial Work Plan for the 2020-2021 biennium (BWP 20-21) was approved by the PAHO/WHO Director and Executive Management on November 8th, 2019. Its structure continues to be characterized by four main initiatives and 37 Projects or Products and Services (P/S) associated with seven Immediate and Intermediate Results (20.1, 21.2, 22.3 and 26.01, and 120.01, 120.02 and 121.03 of the mirror categories) of the PAHO/WHO Strategic Plan for the period 2020-2025, the Sustainable Health Agenda for the Americas (SHAA 2030) and the Sustainable Development Goals (SDGs) of the 2030 Agenda.

In the analysis carried out for the first semester of 2020, it was observed that despite the COVID-19 pandemic, progress continued in the development of the Center's products and services. Many of the products developed by BIREME in conjunction with its collaboration networks were focused on supporting countries with scientific-technical information aimed at responding to the COVID-19 pandemic.

The following table presents the initiatives and their products and services for BWP20-21 in a structured way.

BWP20-21
Initiatives and projects
BIR01 - Information and knowledge management
Strengthening of the Collaborative Network for Information Management
Thesaurus DeCS compatible with MeSH, interoperable with UMLS and extended with other terminology categories
VHL model of management of scientific and technical information on health applied in AL&C
LILACS updated and available as the main index of scientific and technical output of LA&C
Referential sources of information updated and available in the VHL
Experts and Institutions Directory published in the VHL
SciELO Public Health Collection developed, expanded and strengthened
Ethics Research Committee Management Platform - ProEthos available to the countries
Global Index Medicus (GIM) operating in coordination with the Regional Offices and WHO Headquarters in Geneva
Bibliographic control and visibility of the scientific and technical output in health of LA&C broadened
BIR02 - Information Services
Services that contribute to reduce the gap between scientific knowledge and health practice developed
VHL reference and user services strengthened
Personalized information services expanded and improved - MyVHL
VHL search and retrieval interface
e-BlueInfo app implemented and with information for health teams
Capacity building in scientific communication in the Region
Distance Learning (EAD) and Open Educational Resources (OER) developed and available in the VHL
Promotion of access and use of health information in the Region
BIR03 - Intelligence in Health Sciences Information
Infometrics of the scientific and technical output of LA&C published in LILACS
VHL Infobutton service operating in health information systems
Impact analysis on the use of information products and services developed by BIREME
Open data of the VHL referential sources of information
LILACS promoting Open Science in LA&C
BIR04 - Leadership and Management of BIREME
BIREME Institutional Framework strengthened with the recommendations of its Governance Committees and PAHO Regional Strategy (ASSA 2030)
Management System implemented in accordance with PAHO's institutional structure, recommendations and rules
Risk management and mitigation response plans approved and executed
BIREME's communication strategy implemented and effective
Effective HR Management
PAHO procedures and recommendations related to the administrative management of the Center implemented
IT infrastructure available and up-to-date according to PAHO-driven standards and management methods
BWP developed and monitored
Planning and financing of general operating expenses
Learning plan implemented
CRICS XI and VHL VIII implemented
Project Management to support the development of agreements with focus on the mobilization and monitoring of funds
Report and Visibility of successful experiences related to SDG3 / Agenda2030

Table: BWP 2020-2021; new P/S highlighted in yellow

2.1 Summary of BIREME's Initiatives and Projects

A summary of some of the progress on each work plan initiative appears below.

Initiative BIR.01 - Information and knowledge management

▪ **LILACS** was updated daily with contribution from its Collaboration Network. It reaches more than 929 thousand records, indexing articles from 898 journals and other types of documents, an increase of 5% in records since the VIII Session of the AC. The management of the update, maintenance and publication processes of LILACS is integrated into the system "Integrated Service for the Administration of Referential Information Sources (FI-Admin)" developed by BIREME. This system has been updated monthly with new functionalities, corrections and improvements to improve the bibliographic description and the cataloging and indexing process. In 2020, there were more than 130 updates. Improvements were made in the first semester of 2020 in the peer review and inbreeding module in the Electronic System for the Evaluation and Selection of LILACS Journals, allowing the systematization of the work processes between scientific editors, selection committee and evaluators through a platform Web.

▪ As part of the celebration of LILACS database's 35 years, its celebratory website was launched on October 2020 with the collaboration of the LILACS network, which sent historical data, testimonies and photos documenting LILACS history (https://lilacs.bvsalud.org/35anos/es) and the new selection and permanence criteria for LILACS scientific journals. The commemorative session featured 415 connections from 27 countries in the Americas and Europe.

▪ **The VHL model** of health information and knowledge management continues to be developed and adapted to the new requirements of the Network, and is applied in more than 80 national, thematic and institutional VHL initiatives (instances) in the countries of the Region. The VHL Guide has a new updated version and its contents distributed in the different sections of the VHL Network Portal (http://red.bvsalud.org), which has the function of supporting the application of the VHL Model and presenting the VHL Collaboration Network.

▪ The technological platform for the management of the VHL and its information sources continues to be updated, using modern technologies and open source platforms.

▪ In 2020, the Regional initiative of the **VHL Traditional, Complementary and Integrative Medicines of the Americas** (TCIM Americas VHL) has the participation of 15 countries (http://mtci.bvsalud.org). The TCIM America Network continues to be very active and

developing different information products such as: knowledge Window of Knowledge, evidence maps and international webinars about the contributions of TCIMs in the context of the COVID-19 pandemic.

- The Nursing VHL was renewed involving several Latin American countries and Portugal. Two windows of knowledge were launched, including a panel with indicators of the nursing literature available in the BDENF regional base, the Network being very active within the framework of "Nursing Now", an initiative launched by the WHO (http://bvsenfermeria.bvsalud.org).

- The **DeCS** continues to be updated annually, in accordance with the MeSH update maintained by the NLM, in the English, Portuguese and Spanish languages. The Spanish version of LA&C has the collaboration of the *Facultad de Medicina de Universidad de Chile* and the Spanish version with the collaboration of the *Instituto de Salud Carlos III*. In 2016, the MeSH translated into French was incorporated into the VHL, in addition to the translation of the exclusive DeCS categories (Public Health, Homeopathy, Sanitary Surveillance and Science and Health) in collaboration with the Hospital de Rouen in France, with annual updates. The DeCS has been extended with new descriptors related to PAHO's priority cross-cutting themes (Gender, Ethnicity, Human Rights and Equity) and to the themes of Environmental Health, Public Health Engineering, Digital Health, and Access and Universal Health Coverage (http://decs.bvsalud.org/)

- The new thesaurus management system, integrated to the FI-Admin system, with the ability to manage multiple vocabularies in multiple languages, has been developed and is in operation, since the 2019 version of DeCS/MeSH, replacing the legacy system of more two decades. In the same system, the vocabulary of Environmental Health and Public Health Engineering is also maintained, under the responsibility of the National Health Foundation (FUNASA). The DeCS/MeSH 2020 version in the English, Portuguese, Spanish and French languages has been published in the first semester and in October the update and translations started according to the MeSH 2021 version. BIREME launched the new website in 4 languages to consult the DeCS/MeSH descriptors on September 18, during a virtual event with the participation of 390 people from 28 countries in the Americas (22) and Europe (6) regions.

- The **MeSH 2020** version incorporates 30 of the new terms resulting from the DeCS revision and expansion project for cross-cutting issues (Gender, Ethnicity, Human Rights and Equity),

highlighting the impact of BIREME's collaboration beyond the annual update and the Portuguese and Spanish translation of MeSH, including exclusive DeCS categories.

- From the visualization of the metadata of authors, institutions and DeCS/MeSH terms applied in the indexing of documents in LILACS, a directory of experts and institutions in certain health topics was generated.

- Through the FI-Admin system, the contribution of the Cooperating Libraries Network to a growing number of databases of different types is managed: bibliographic, multimedia resources, legislation, internet sites, events, and others.

- The **open educational resource** management and publication service continues to be integrated into the Virtual Campus of Public Health (CVSP) and the VHL, as well as the health legislation management service.

- In 2020, around 60 researchers, scientific editors, health professionals and graduate students from El Salvador were trained in Scientific Communication issues through a face-to-face course developed at the National Institute of Health. Considering the pandemic, other planned courses have had to be postponed. During the year, a series of webinars on scholarly communication topics were held.

- **The self-learning course on Scholarly Communication in Health Sciences,** hosted in the Virtual Campus of Public Health (https://www.campusvirtualsp.org/en), aims at promoting the publication of the research results in the countries of the Region. After launched in November 2019 and to date, it has over 12,000 enrolled and over six thousand have completed the training activity. Of the professional categories who took the course, nursing professionals are in first place, followed by general practitioners and specialist physicians. The success of the Spanish language course led the Brazilian Ministry of Health to include its translation into Portuguese in the TA6/TC95 project. The translated course has been concluded and its launch is scheduled for the beginning of December 2020.

- In addition to the self-learning course, a series of webinars on scientific communication topics were held for the VHL and BiblioSUS networks, as part of the TA6/TC95 project and participation in nine national and international scientific meetings, presenting lectures on scholarly communication topics.

  - **The GRADE International Guide Base (BIGG),** launched in 2019, continues to be updated and available for access on the VHL regional portal. Reaches more than 900 registered guides (Nov 2020)

- A new database dedicated to studies of systematization of evidence for health policies was developed, named **PIE - Policy Informed by Evidence**, which is already available in the VHL and has more than 560 studies including policy briefs, deliberative dialogues and other types of content that systematize the evidence.

- The **BRISA / RedTESA database** offers access to more than 1,900 health technology assessment reports, published by 31 institutions in 13 countries of the Americas. Due to the COVID-19 pandemic, a special section has been created at the base with more than 270 evaluation reports on drugs, medical devices and protection. The second semester shows an increase of 500% in the number of users, 485% of sessions and 343% of visited pages.

- BIREME's technical cooperation has been maintained in the development of regional and international projects such as:

  - ProEthos, for the systematization of the activities of the research ethics committees, supporting the teams from Argentina, Honduras, Guatemala and Peru in the implementation of the platform, as well as the PAHO Headquarters, in coordination with the Regional team of Bioethics, for the use of ProEthos in PAHOERC - PAHO / WHO Research Ethics Committee. In the second semester of 2020, the project to update the ProEthos platform began to improve and develop new functionalities, according to the experience in use by the PAHOERC team. In coordination with the Regional Bioethics team, ProEthos was presented for the coordination of the WHO Research Ethics Committee, for adoption in Geneva. In the interest of the WHO, the platform is in the process of being evaluated and updated to comply with all technical cybersecurity requirements.

  - CARPHA EvIDeNCe Portal for access to health evidence for the English Caribbean countries. The MedCarib database continues to be specially updated with about 170 documents on COVID-19 in the Caribbean. The portal had an increase of about 80% in accesses considering the months of January to October 2019 and 2020.

  - The **Global Index Medicus (GIM)** aims to organize and disseminate technical and scientific production in low- and middle-income countries. It is an initiative developed by BIREME in coordination with the WHO headquarters in Geneva and the WHO Regional Offices. The GIM offers access to more than 2.1 million bibliographic references, of which 67% full text, available in the LILACS, AIM, IMEMR, IMSEAR and WRIM databases, representing respectively the regions of the Americas, Africa, WHO

Eastern Mediterranean, South-East Asia and Western Pacific. In 2020 GIM has grown by around 7% with more than 145 thousand new bibliographic references. Its search interface has grown 615% in number of users, 525% in sessions and 233% in pages visited in 2020, compared to 2019. 12% of the pages visited in 2020 refer to documents related to COVID-19 and SARS -CoV-2. The advances of the GIM were presented on November 19 during the annual meeting of the Global Library Group, coordinated by the WHO Library, which has the participation of members of all Regional Offices.

At the request of the WHO, BIREME has contributed to the development of the global base of scientific literature on COVID-19. The WHO COVID-19 Database search interface was launched in April, using the same platform developed for the GIM. This database is updated daily and data curation is the responsibility of the WHO Library team, which coordinates a global network of volunteers and specialists for the identification, selection and organization of documents. The average monthly growth rate of the base is 69% between April and October. To date, there are more than 124 thousand documents available, of which 80% full text. The accesses to the database demonstrate its visibility and global impact, with accesses from 230 countries and territories, according to the Google Analytics service. Comparing the period from August to October with May to July, there was a 93% increase in the number of users, 78% in sessions and 8% in visited pages. With 8 months of operation, they already have more than 515 thousand users, 658 thousand sessions and 1.6 million pages visited.

Initiative BIR.02 – Information Services

- The **self-learning course on access and use of information** to support decisions in health, available in the CVSP, in Spanish and Portuguese, reached from January 2020 to November 2020 more than 28,795 students who took the course.

- In 2020, given the situation of the pandemic, the planned courses had to be postponed, however, virtual activities were carried out. Considering the users of the VHL, the subject of the training has to do with access to information sources, oriented to decision-making in health informed by evidence, for students, librarians and health professionals from El Salvador, Brazil (Universities and Secretaries of Health), Peru and regionally, in the PAHO digital literacy program and within the framework of some events such as: 35th

International Scientific Congress of FELSOCEM (Federation of Scientific Societies of Medicine of Latin America and Caribbean).

- The **VHL Regional Portal** in operation and regularly updated, registered in 2020 (until November 13) the visit of more than 9.5 million users in more than 14 million sessions (accesses, searches), which in turn resulted in in approximately 47 million pageviews

2020 (Nov 13th)	Regional VHL Access		
	Sessions	Pageviews	Users
iAHx search	8,301,258	32,957,595	5233454
Search via Google	2,849,981	6,159,374	2254017
VHL Regional Portal	2,102,506	5,424,294	1184304
LILACS Portal	814,648	1,097,046	446952
Journal Portal	420,025	1,240,066	336020
LIS Portal	46,678	112,536	42717
MyVHL	83,728	261,634	60356
Total	14,618,824	47,252,545	9,557,820
Monthly average	1,461,882	4,725,254	955,782

- The **"Windows of Knowledge" methodology** was updated, a VHL resource that highlights selected content on relevant and / or priority topics, at any given time, with the intention of facilitating access to these content for users who enter the VHL to search for information. In this year of 2020, five new and updated windows of knowledge were developed: two Windows of Knowledge of the VHL Regional Portal: HIV-AIDS, Neglected infectious diseases, Hepatitis, Elimination of solid fuels for cooking, Elimination of open defecation, Global strategy for leprosy and the Coronavirus Disease - COVID-19 Window of Knowledge. Other countries in the Network are also applying the methodology to develop their windows of knowledge, such as: Colombia, El Salvador, Paraguay, Panama, Peru, Uruguay and Brazil. in addition to COVID-19.

- **VHL usage statistics** have shown how access to COVID-19 information follows events at the national and international level. This behavior was observed in 60% of the countries and territories of the Americas that accessed the Knowledge Window of Knowledge on COVID-19 from February to March. This correlation is evidence of the impact of BIREME's technical cooperation to respond to the demand for access and use of information and scientific evidence during this pandemic. For more information, visit https://boletin.bireme.org/en/2020/04/01/covid-19-pandemic-statistics-on-access-to-the-vhl-and-the-extent-of-biremes-technical-cooperation/

- The **User's Service** has the new platform "Ask the librarian" available since April, with easy access to different pages and services of the VHL, such as the COVID-19 Window of Knowledge and the search result pages. Until November it hassim about 330 services

with support information and access to methodologies developed by BIREME, and approximately half of the requests are to subsidize systematic reviews and other types of research.

- The **Reference Network** was very active during the year, with six virtual meetings where participants were trained in techniques for building search strategies that resulted in about 120 search expressions that were applied to generate and/or update the filters in the VHL search system, in the Window of Knowledge and in new interfaces such as Evid@Easy. Only the COVID-19 topic has 31 filters available on different issues such as rehabilitation, vaccines, reinfection, complications and others. The Search Strategies Repository has a record of 530 filters (https://bvsalud.org/queries/?l=en_US).

- The **VHL Personalized Services (MyVHL)** that allow users to identify themselves to use selective dissemination of information services, have made it possible to know the profile of interest of the VHL public, making it possible to offer specific information by user segment. MyVHL has more than 46,000 active users, an increase of 24% in the last 12 months, with an average growth rate of 16% of users using the services on a monthly basis. From December 2018 to date, there are more than 3,200 APP installations, an increase of 72% in the last 12 months. Since November 2019, the App has a new version of personalized services, based on the results of the user satisfaction survey carried out in April 2019 with 592 LA&C participants.

- The **e-BlueInfo is an App** that brings information for clinical practice into the hands of primary health care professionals. Brazil, Peru, Guatemala and El Salvador participate in the initiative, publishing selected and updated content in the App. Since its launch in December 2018, there have been more than 5,400 installations, a rise of 107% in the last 12 months. Comparing January to October 2020, with the same period of 2019, e-BlueInfo shows a 124% increase of visits and 102% of pageviews. Due to the pandemic, all participating countries have entered documents on COVID in the context of their health systems and services. The following countries consider the adoption of e-BlueInfo: Colombia, Costa Rica, Cuba, Guyana, Mexico, Nicaragua and Paraguay.

- **A new contact service with VHL users** was implemented in 2020, using an open source platform, replacing the old user feedback system. Much more robust, this service allows better management of the communication flow between VHL users and BIREME technical teams, reducing response times, avoiding rework, allowing the development of a knowledge repository based on the exchange of information, promoting traceability of

communications and generating indicators. With the growth of the knowledge database, it will be possible to offer a chatbot to users for self-resolution of doubts or problems.

- A **new search resource in the VHL, named Evid@Easy**, is being finalized, which functions as a guided search for evidence through specific filters that represent the stages of the decision-making process.

Initiative BIR.03 - Intelligence in Health Information Sciences

- **Specialized tools have been adopted in data management, quality and visualization**, allowing to improve the metadata stored in LILACS and generate and visualize infometric indicators of the scientific and technical production in health of LA&C. A new conceptual model and a new systems architecture are under development to promote a framework for the governance of the data available in the VHL information sources, including the development of open interoperability mechanisms for the collection of bibliographic description metadata. . Data extraction, transformation, aggregation, analysis and visualization techniques were applied to generate indicators of the scientific and technical production stored in LILACS and MEDLINE, being periodically updated with panels of indicators related to the Research Institutes of the State Secretary of Health of São Paulo, the areas of Human Resources in Health, Health Systems and Services, Water and Basic Sanitation, Agenda 2030, Universal Health, transversal axes (gender, ethnicity, equity and human rights), nursing and contribution indicators of the Cooperating Centers LILACS. Indicators of the scientific and technical production available in the Index Medicus of the other WHO regions that make up the GIM are also kept updated.

- The **Infobutton VHL service** has been developed, which follows international standards for the exchange of data with Electronic Health Record Systems, promoted by the HL7 (Health Level Seven International), which allows retrieving the scientific evidence available in the VHL in accordance with the context of the patient's medical history. This service will be available in version 2 of the e-BlueInfo App, allowing health professionals to access the evidence available in the VHL related to the ICD-10 and SNOMED-CT codes.

- A service for **identifying DeCS/MeSH terms** present in the title and summary of documents is integrated into the document indexing process in the FI-Admin system, facilitating the indexing process with future contribution to the development of an automatic indexing system. An alliance is being negotiated with the Barcelona Supercomputing team and the Carlos III Health Institute in this area.

- The **Evidence Map Methodology** adapted by BIREME was applied in the development of new evidence maps, with emphasis on the maps on clinical effectiveness of 9 integrative health practices to meet a demand from the Brazilian Ministry of Health. These maps were released in November 2020 and are supporting the National Policy of PICS, of Brazil, as well as the agenda of suggested topics for new research.

- The subject of COVID-19 was addressed in the TCIM Americas Network, which systematized the evidence from reviews and randomized clinical studies on the application of some integrative practices in the clinical management of COVID-19 symptoms, to improve immunity and for mental health in conditions of social isolation and trauma. This map was the basis of the [recommendation of the National Health Council](#) of Brazil to the Ministry of Health, to the State, Federal District and Municipal Health Councils of Brazil. In addition, a series of webinars was generated to present and promote discussions based on the findings of this Evidence Map, involving other countries outside the Region, such as Italy, the United States and India.

- BIREME has developed a platform for the publication of user surveys personalized to the different types of website pages, with the aim of obtaining the opinion of the users about the published content and the available functionalities. The use of this platform, named IM (Impact Measurement), will promote a new way of measuring and analyzing the impact of information products and services. The piloting will be on the pages of the Regional VHL and its search interface. Together with the IM, BIREME is also promoting the redefined use of access statistics, associating them with the demand for technical and scientific information in different health contexts.

Initiative BIR.04 – BIREME's Leadership and Management

- The 2020-2021 BWP continues to advance, although BIREME staff have been in emergency teleworking since March 20, aligned with PAHO/WHO procedures and policies and the link of their P/S, activities and tasks to the Strategic Plan term of the Organization (2020-2025). It has four initiatives, 37 P/S and 206 activities.

- The BWP 20-21, in November 2020, has been 50% implemented and continues to be monitored even with the preparation of studies and periodic controls on the formalization of its financing sources and with the support of fortnightly meetings to monitor products, services and projects and the respective use of regular and non-regular financial resources (grants) and the corresponding operation of the PAHO/WHO WD/PMIS system;

- Ad-Hoc Sessions of BIREME's Advisory Committee (AC) and Scientific Committee (SC) took place on July 30th and August 28th, respectively, with the aim of informing the

Committees members on the status of implementation of the recommendations contributed in the sessions of 2019 and also on the situation of mobilization of financial resources, considering the challenges of formalizing agreements due to the global pandemic of COVID-19 in 2020.

- Close communication with the Ministry of Health of Brazil (MoH) in coordination with PAHO Brazil for the formalization of Terms of Cooperation (TC) for the development of projects, products and services for the improvement of BIREME and for national technical cooperation and regional. The respective financial contributions, which are formalized through TC, are made viable annually. The effective routing efforts from TA6 to TC95 and TA2 from TC93 are highlighted, the latter in the final process of formalization

- BIREME's management continues to be effective and in line with the policies and procedures of PAHO / WHO and its banking services coordinated with PAHO/WHO Brazil, given that BIREME's bank account in the Bank of Brazil was closed in March 2020.

- Still within the framework of its new institutional framework in the process of implementation, its Statute is still pending formalization and the CNPJ (National Registry of Legal Rights) of BIREME is updated together with the national bodies, mainly in the Federal Revenue, which strengthens the institutional framework from the Center in Brazil.

- BIREME's operation strengthened in the country, which requires, through the Ministry of Foreign Relations and in coordination with the Ministry of Health, the rescue and formalization of the BIREME Headquarters Agreement in Brazil to enable in good time the annual reviews of the Government of Brazil for the improvement of BIREME.

- The regular actions for the development of competencies and strengthening the organizational climate are continued virtually, such as training programs with the support of Human Resources from PAHO/WHO Headquarters and External Consultancy, work gymnastics twice a week (with the support from the local university, UNIP - Universidade Paulista) and the *Cafés com Ideias* on a monthly basis that include information and knowledge exchange activities for learning and celebrating birthdays collectively.

- BIREME/PAHO/WHO has an IT infrastructure that responds to technical cooperation demands by making available a set of servers installed in a datacenter a few kilometers from its physical facilities and with direct access to the international Internet through the Network Academic of São Paulo (ANSP, Academic Network at Sao Paulo). There are around 300 technical cooperation instances hosted on these servers and which have an internal and external monitoring system to guarantee their high availability. Additionally, the backup system is regularly reviewed and improved, helping to minimize impacts in the event of incidents. Another important point is information security and, in this context,

BIREME/PAHO/WHO has been developing a set of good practices to guide the implementation and updating of the systems used in technical cooperation. More information in the BIREME newsletter (https://boletin.bireme.org/2020/05/30/la-infraestructura-de-ti-de-bireme-y-el-uso-de-las-tic-en-el-teletrabajo/);

- BIREME formal communication channels, dynamic and in operation (institutional page (in Spanish, English and Portuguese), Intranet, Facebook, Twitter and newsletter) with emphasis on the six texts published in three languages (Spanish, English and Portuguese) monthly in the BIREME Bulletin, which is in its 50th edition (http://boletin.bireme.org/). The Bulletin is disseminated to the institutions that are part of the VHL and LILACS Networks, government entities, and throughout PAHO/WHO.

- BIREME's institutional web page was updated and now operates on a Drupal platform, such as the web pages of the Headquarters, Representations and PAHO Centers. The new BIREME page includes information on the Center, its mission, objectives and history, governance, its main products and services, news, and main institutional supporters (http://www.paho.org/bireme/), in three languages.

- BIREME's presence on social media continues with daily updates on the progress of BIREME's projects, products, and services, and sharing relevant information from PAHO and WHO on COVID-19.

2.2 BIREME financial structure

The establishment of a stable and balanced structure for financing BIREME was one of the main motivations for the BIREME's institutional reform. The Statute of BIREME foresees that this structure of financing is analyzed and recommended by the Advisory Committee of BIREME, also recommending the financial contributions from Brazil and from PAHO, and from the participating members of BIREME.

The following table shows the distribution of financial contributions received in 2020.

Sources	Fund type	2020 (USD)
1 PAHO/HQ Contribution – 20-21	ACP	635,001
2 Projects in the context of PWR Brasil TCs	NVC	332,134
3 Projects with WHO funds	OMS	42,500
4 NLM/NIH	BSS	170,715
5 2018-2019 Biennium Balance	18-19	1,248,886
6 Other Cost Centers - Development with countries in the Region	OCC	56,500
		2,485,736

Observations:

     1. PAHO Regular Funds in 2020
     2. TC: 60 (CONASS), 68 (CNS), 71 (Leprosy), 91 (DECIT), 95 (CGDI/SE/MS and ECOS VHL) and 98 (Nutrition)
     3. Global Index Medicus (GIM/AFRO) and WHO Database COVID-19
     4. Indexing Services 1st SEM 2020
     5. BSS and TC 60 (CONASS), 87 (FUNASA), 93 (Improvement of BIREME), 95 (CGDI/SE/MS) and 98 (TCIM/PICS)
     6. Regional (CDE, HSS and FPL) and countries (ARG and ELS)

Contribution in pipeline:

- TA2/TC93. It is being formalized with the MoH including its regular contribution for 2020/2021 (approx. US$ 1.5 million (approximately U$1.5 million)

Regarding the Terms of Cooperation (TC) with the Ministry of Health of Brazil (MoH), through PAHO/WHO Brazil:

TC93/TA2

The [Term of Cooperation 93](#) is directed to the "Development and Improvement of the Latin American and Caribbean Center for Information on Health Sciences in the context of Information and Knowledge Management in the 2030 Agenda and Universal Health" in particular for the strengthening, improvement and implementation of its program of technical cooperation and institutional sustainability as a Specialized Center of PAHO/WHO in scientific and technical information in health.

TC95/TA6

The [VI Additive Term to the 95th Technical Cooperation Term (TA6 / TC95)](#) between the Ministry of Health and the Pan American Health Organization/World Health Organization of Brazil (PAHO/WHO Brazil) is oriented to the Improvement of the Management of the Executive Secretariat of the Ministry of Health of Brazil. This TC has the participation of the technical areas of PAHO in Brazil and BIREME / PAHO / WHO, which specifically cooperates with a result related to the management of scientific and technical information and communication in health, more specifically in the context of the information sources of the VHL and of the national network of libraries that contributes to VHL Brazil, libraries of the BiblioSUS network, thematic libraries such as VHL Primary Health Care and institutional libraries, such as the VHL of the Ministry of Health. In addition, it includes components that aim to expand bibliographic control and improve the quality of the description of scientific and technical production in Brazil and expand access and

use of scientific knowledge within the Unified Health System (SUS) through products knowledge translation. In summary, it is about bringing clinical practice closer to knowledge and scientific evidence generated through academic research for the continuous improvement of health services.

Projects are being developed through PAHO Brazil in the context of the Terms of Cooperation with the country, considering that BIREME cooperates with the information and knowledge management component: TC60 (CONASS), TC68 (CNS), TC91 (DECIT) and TC98 (TCIM/PICS and Nutrition).

The financing of the BIREME 2020-2021 Biannual Work Plan (BWP) has regular contributions from its main institutional partners and non-regular contributions from regional technical cooperation projects within the framework of TCs with PAHO / WHO Brazil in the country. These projects also result in products and services for use by the countries in the Region. PAHO / WHO and the Ministry of Health of Brazil maintained their contributions for the improvement and technical cooperation of BIREME. As of the affiliation of new members, as established in the BIREME Statute, the sources of financing may be diversified. At the same time, BIREME is making efforts to mobilize additional resources through projects, agreements and services as foreseen in its proposed 2020-2021 Resource Mobilization Plan to guarantee the financial sustainability of the Center.

3 Main advances of BIREME's technical cooperation according to the recommendations of its Governance Committees

The recommendations of the Governance Committees, both Advisory and Scientific, are considered in the preparation of BIREME's BWP. Next, the most outstanding ones in 2020 are mentioned.

3.1 Recommendations of the VIII Session of the Advisory Committee (2019)

I. Generation of alliances: Search for intersectoral collaboration; public-private partnerships, non-profit NGOs

BIREME develops technical cooperation initiatives with institutions and organizations at the local, national, regional and international levels. Among them are included:
- Government institutions related to health, science and technology, the environment and other areas - Ministries, National Councils of Science and Technology, Municipal and State Secretariats;
- Research supporting foundations;
- Health academic institutions, scientific editors of LA&C journals, researchers, authors, and health sciences graduate students; and
- Public health and related areas organizations, associations and scientific societies.

Next, some examples are mentioned:

Ministry of Health of Brazil - BIREME maintains a historical relationship with the Ministry of Health (MS) of Brazil since its foundation 53 years ago. The institutional relationship with the MS is operated through Agreements and Terms of Cooperation (TC) also with PAHO/WHO Brazil. Currently, TC93 and TC95 are oriented respectively at the strengthening and improvement and implementation of their technical cooperation

program as a Specialized Center of PAHO/WHO in scientific and technical information in health.

Other bodies with which BIREME maintains a close relationship and with which specific projects are maintained are the São Paulo State Health Secretariat, the São Paulo Municipal Health Secretariat, the Oswaldo Cruz Foundation (FIOCRUZ), the National Commission of Secretaries of Health (CONASS), the National Commission of Municipal Health Secretaries (CONASEMS), the National Health Commission (CNS) and the National Health Foundation (FUNASA), among others.

National Library of Medicine (NLM) of the United States - The National Library of Medicine (NLM) of the United States and BIREME maintain a cooperative institutional relationship of more than 50 years sustained in favor of the access and dissemination of scientific information in health in Latin America and the Caribbean.

The cooperation is based on lines of action for the treatment, dissemination, and communication of scientific health information generated in the countries of the Region, through document access services; the availability of the MEDLINE database in the VHL collection; development of the DeCS (Health Sciences Descriptors), vocabulary in Portuguese and Spanish through the translation and extension of MeSH (Medical Subject Headings); and support in holding scientific information meetings.

The translations into Spanish and French have the collaboration of the *Biblioteca Central de la Facultad de Medicina de la Universidad de Chile*, the *Biblioteca Nacional de Ciencias de la Salud del Instituto de Salud Carlos III* of the Ministry of Economy and Competitiveness from Spain, and CHU Hôpitaux de Rouen, France. The MeSH terms in French are translated by the *Institut National de la Santé et Recherche Médicale* (INSERM), France.

EPISTEMONIKOS - A technical cooperation agreement between the Epistemonikos Association and the Pan American Health Organization (PAHO/WHO) allowed the integration of the Epistemonikos database (a highly efficient search resource, which groups together a large number of systematic reviews and allows access to the body of evidence for a specific question in a simple and intuitive way. In addition, it offers tools that allow the choice between different systematic reviews and easily keeps the evidence about a specific issue updated.

With **councils** that add interest from the municipalities, community participation and social control of Brazil: cooperation projects were established to expand the visibility of non-conventional information (gray literature) generated by the health system and services, especially in municipal secretaries and health states. The projects were established with the National Council of Health Secretaries (CONASS) and with the National Health Council (CNS).

With the **Economy Sector**: Project "Indexing of IPEA's (Institute of Applied Economic Research) health output in the LILACS database". The contribution already reaches more than 600 documents and when the ColecionaSUS is also considered, it sums over 900 documents. Within this same sector, an alliance with FUNDACENTRO is being explored.

FELSOCEM - A non-for-profit scientific organization dedicated to promoting the development of scientific research in the undergraduate courses of Latin American medical schools by improving the quality and scientific level of the research developed, among other activities. BIREME contributes with the training of young multipliers in access and use of information, as well as in scholarly communication.
In 2020 the collaboration was carried out on the occasion of the celebration of its Annual Congress, where BIREME offered conferences training activities on the use of scientific information for health decision making.

II. Strengthen and expand BIREME's collaboration networks

BIREME's collaboration networks have remained active. Here follow some examples:

- Strengthening of the VHL Network. An action plan was developed to strengthen the networks at the country level. Specific actions have been developed in some countries included in the projects and terms of cooperation, as has been the case of the BiblioSUS Network in TC95. The VHL Network portal is kept updated with activities carried out by each of them (red.bvsalud.org). At this time, a model of VHL maturity is being worked on and progressed.
- Strengthening of the LILACS Network: The planned capacity development program was carried out in 2020, with participants from 23 countries in Latin America and the Caribbean and Portugal, Spain and Italy.

- Nine LILACS coordination meetings (157 connections from 13 countries);
- Nine sessions on Document Indexing according to the LILACS Methodology (328 unique participants from 21 countries, about 850 connections and 725 tasks performed);
- Nine webinars on good practices in the editorial processes of scientific journals for LILACS (680 unique participants from 22 countries, 1781 connections and 1249 tasks performed);
- Training on methodologies of the information sources of the Virtual Health Library (Six sessions in Portuguese - 175 unique participants and 7 Spanish - 263 unique participants).
- Training sessions and methodological support were also held for the Health Documentation Network in Mozambique (4), the Network of Health Secretaries of Brazil (14) and Nicaragua (3)
- Strengthening of thematic networks: there were important advances with the networks on leprosy, nursing, traditional, integrative and complementary medicine, and health economics.
- VHL Leprosy Network: efforts were directed to reactivating the Advisory Committee and defining strategic actions for the development and sustainability of the VHL, including updating the information sources and the technological platform of the VHL to offer a better service to users.
- VHL Nursing Network - one of the priorities of the Nursing Network was the confrontation with COVID 19. Two knowledge windows were developed: "Nursing Work in Latin America & Caribbean" which aims to highlight and systematize scientific production on the force of nursing work in Latin America & the Caribbean, and the window of knowledge "Nursing COVID-19" which aims to systematize and disseminate the technical-scientific nursing literature, as well as documents and initiatives that express the participation of nursing in the management of COVID-19, through research and scientific production and allow the exchange of researchers.
- TCIM VHL Americas Network has worked very actively and articulated in the production of content for the systematization of information related to the subject of traditional, complementary and integrative medicines, in addition to COVID-19. Highlighted are: publication of 10 evidence maps; development of a knowledge window of knowledge on the contributions of TCIMs to the COVID-19 pandemic; and a series of webinars that promoted

rich discussions and the dissemination of the main topics addressed on the maps and in the window of knowledge.

III. Implement strategies and mechanisms so that products can impact remote regions

As mentioned, progress is being made in the implementation and improvement of the e-BlueInfo application aimed at Primary Health Care professionals, which after being launched in some countries has seen great access from areas far from the capital.

IV. Intensify actions to promote BIREME's products and services, including their dissemination at national events; Disseminate information on BIREME's products and services in the Ministries of Health, identifying focal points at the technical level

- To facilitate the dissemination of the Center's main products and services, as well as information for users, a brochure was developed, which information content can be seen in ANNEX 1
- BIREME's products and services are usually presented at face-to-face events. In 2020, given the situation of the pandemic, this has not been possible, however, it is worth noting that BIREME has still been able to participate in national, sub-regional and regional events. In ANNEX 2 there is a list of the main events in which BIREME has participated.
- Communication plans. They are being implemented within the framework of projects that have the contribution of BIREME, in such a way as to disseminate the products and services that are incorporated and the advances in the different stages of the project.
- Formal channels of communication of BIREME dynamic and in operation and being used for the dissemination of BIREME's products and services. The Bulletin itself is being disseminated to the institutions that are part of the VHL and LILACS Networks, government entities and throughout PAHO / WHO.
- Communication actions with the focal points in the PAHO Offices in the countries to disseminate BIREME's information products and services, supporting their implementation at the local level and advocating with the national authorities.

V. Develop a culture of research, data mining and present BIREME projects to academia

The promotion of the research culture has been reflected in the products developed by the thematic networks, such as the nursing windows of knowledge and the TCIM. In relation to this last issue, BIREME has continued its collaboration with the Brazilian Academic Consortium for Integrative Health (CABSIn) in the area of the TCIM Americas Network, which is aimed at strengthening research in the area, including capacity building for research and dissemination of scientific evidence. CABSIn has been actively contributing to the production of the evidence maps and matters of scientific dissemination based on the findings identified in said evidence maps. The development of infometrics and evidence maps are a good example of BIREME's contribution to health decision-making and scientific communication data.

VI. Carry out a mapping of actors, networks, scientific societies at the Regional level and in the countries that can support actions to promote BIREME's products and services

BIREME maintains a mapping of all the networks with which it works, including: VHL Network, LILACS Network, Network of Referees, Network of Platform Developers (RedDES), Thematic Networks (Nursing Network, TCIM Network, Network of Evaluators of Health Technologies-RedETSA, etc). Communication is constantly maintained with these networks to disseminate information about events, progress in the development of products and services, launch of new products, among others.
Since the beginning of 2020, BIREME has taken on the task of mapping all the societies and associations of public health, Primary Health Care, nursing and other health areas and disseminate among them the specific products related to their work.
In the face-to-face technical missions such as the one that took place in January 2020 to El Salvador, the opportunity was taken to hold meetings with presidents of scientific societies and associations and thus seek the opportunity to disseminate our products and services. (https://boletin.bireme.org/en/2020/03/02/el-salvador-strengthens-components-of-scientific-and-technical-information-with-the-support-of-bireme/)

3.2 Recommendations of the V Session of the Scientific Committee (2019)

Among the recommendations of the Scientific Committee below, the most outstanding advances are mentioned:

I.   **Continue working on innovative products and services that support the development of the scientific ecosystem and the informational capacities of the actors involved in the health sector**

The Evidence Map Methodology of 3IE (International Impact Evaluation Initiative) was adapted by BIREME and applied in the production of 15 evidence maps that present the selected evidence studies graphically and dynamically, making a relationship between interventions, findings and evaluated effect in such studies.

The Windows of knowledge Methodology was updated, making it possible to apply it for the development of new windows of knowledge linked to VHL instances in the countries and subject areas. COVID-19 was the subject of four windows of knowledge, one being linked to the VHL Regional Portal, two linked to thematic instances of the VHL (Nursing and Traditional, Complementary and Integrative Medicine) and one linked to the El Salvador VHL.

Evid@Easy is a new resource that will be integrated into the search interface of the VHL Regional Portal, which will guide the user in the options-based search.

II.   **Reiterate the importance of open science as an axis of work and orientation for BIREME**

BIREME continues to work on actions related to open science, such as those carried out within the framework of LILACS:

- New fields and subfields in the LILACS methodology already implemented or under development in the database management system (FI-Admin): persistent numbers such as DOI, ORCID and ResearcherID, type of creative common license and fields for relationship between publications, research data, preprints and other publications to promote open linked data.

- Criteria for selection and permanence of journals indexed in LILACS recommends continuous flow publications, the acceptance of journals that publish preprints and international standards for serial scientific publications,
- Dissemination of the topic of Open Science in the webinars of "Good practices in the editorial processes of scientific journals for LILACS" where open review, preprints and open science itself were addressed.
- The preprint issue has been addressed in several national and international events, highlighting its access through the VHL search interface, which today has several collections such as those of Scielo, FIOCRUZ, and the COVID-19 collections by medRxiv, bioRxiv
- Preparation for opening the data service of the information source management system (FI-Admin).

III.   Design quality and impact indicators for BIREME products

In addition to the access indicators, application of BIREME products in public policy, as mentioned, BIREME is developing a platform named IM (Impact Measurement), to measure and analyze the impact of information products and services through user surveys.

4. CRICS – Regional Congress on Health Science Information

CRICS, since its first edition in 1992, is one of the most important and consolidated international congresses on scientific and technical information and periodically addresses the state of the art in the fields of information, knowledge and management of scientific evidence. It includes topics of scientific communication, library science, information science, methodologies and information technologies and their application in national research, education and health systems.

The VHL Regional Coordination Meeting, which is the most important exchange forum of the VHL cooperation network, is held as a preliminary event to the CRICS and analyzes the development status of the VHL at the regional level. national, thematic and institutional.

Both events are coordinated by BIREME in cooperation with national and local institutions in the host countries.

BIREME is in charge of the organization of the CRICS (Regional Congress of Information in Health Sciences), which its eleventh edition should have been held in 2020, however, due to the pandemic it has been postponed to 2021 and will be an opportunity to exchange with the scientific community all the advances built with our collaboration networks.

5. Human Resources and cooperative work

BIREME's intellectual capital continues to be made up of professionals with experience in information management, the development of methodologies and technologies for the management of scientific and technical information, and an administrative infrastructure that includes information technology and management infrastructure. Two link categories characterize the personnel contracts: PAHO / WHO (02 collaborators) and HSP / SPDM (38 collaborators).

The Center maintains its Personnel Plan aligned with PAHO / WHO strategic planning, taking into account policies, procedures, and internal controls to ensure institutional alignment with transparency and the commitments of all its personnel.

Something that BIREME highlights is the cooperative work through networks of individuals and institutions for the management and exchange of information and knowledge present in 30 countries with more than 2,000 institutions. This networking offers flexibility in the expansion and inclusion of new members, as well as the exchange of ideas, experiences and knowledge.

6. Concluding remarks

The progress of BIREME's operation is evidenced by the elements that distinguish it, such as its ability to:

- Acting together with networks of institutions and health professionals and their capillarity in LA&C, working with more than 2,000 institutions;
- Supporting effectively to increase the visibility of the scientific production of LA&C;
- Providing, through DeCS, the controlled and structured vocabulary using health terms in four languages and following international standards;
- Generating open access methodologies, software, and technologies;
- Developing local capacities for the access, production and management of information;
- Contributing to projects at the Global, Regional, Subregional and National levels.

BIREME as the PAHO/WHO reference Center for scientific and technical information and communication, ensures the countries of the region continuity of governance, development, operation and innovation of products, services, events, information systems, methodologies and technologies of scientific and technical information in accordance with the international state of the art. It contributes in a systematic and efficient way to support, strengthen, and improve the capacities and infrastructure of scientific and technical information and communication in the Region.

The year 2020 has been marked by the emergency situation of COVID-19, however, BIREME has continued its operation through teleworking delivering the results that have been planned in its BWP 2020-2021, taking into account the recommendations from its Governance Committees.

ANNEX 1 – BIREME's Products and services

Why use BIREME's products and services?

- More than 50 years of tradition, knowledge and experience in information management in health sciences.
- It is a specialized international non-profit Center whose objective is to improve the health of the peoples of the Americas.
- It belongs to PAHO / WHO, the oldest international health organization in the world.
- It has solid alliances with governmental and academic institutions.
- Offers innovative information products and services that follow international standards and the state of the art in information technology and methodologies.
- Provide access to up-to-date, reliable and relevant content.

Which are BIREME's products and services?

VHL - Virtual Health Library
The VHL facilitates access and provides visibility to a wide collection of health information sources through Regional, National, and Thematic Portals (instances) that apply the VHL Model of health information management. https://bvsalud.org/

LILACS - Latin American and Caribbean Literature on Health Sciences
The main and most wide-ranging database of scientific and technical literature in health published in LA&C countries. It indexes journals, books, theses, technical reports, and other types of documents. http://lilacs.bvsalud.org/

Health Science Descriptors (DeCS/MeSH)
A Health Science terminology thesaurus in Portuguese, Spanish, English, and French.
https://decs.bvsalud.org

Global Index Medicus (GIM)

Biomedical and public health literature produced by and within low-middle income countries. https://www.globalindexmedicus.net/

VHL Network
Virtual libraries that apply the VHL Model for the development of VHL Instance on a country, region, thematic area or institution. http://red.bvsalud.org/

My VHL
Custom service for organizing and storing documents according to the user's profile and area of interest, available on the web and as a mobile app. https://platserv.bvsalud.org/

e-BlueInfo
Mobile app that provides health practice information for health professionals at the palm of their hands. http://e-blueinfo.bvsalud.org

Windows of Knowledge
A service that brings together, organizes, and highlights selected information from the VHL and other sources of information, which are relevant for priority health issues. https://bvsalud.org/post_vitrines

Evidence Map
Graphical representation of the evidence that exists in a particular area, classified by types of evaluated interventions and measured results. It has a dual function: to synthesize the available evidence and to identify knowledge gaps. https://mtci.bvsalud.org/mapas-de-evidencia/

PIE
Collection of documents that contribute to policy decision-making processes, based on the best available scientific evidence. https://sites.bvsalud.org/pie/pt/biblio

BIGG
International database of guides, protocols and clinical guidelines that apply the GRADE system for evidence assessment. https://sites.bvsalud.org/bigg

VHL InfoButton
Service that recovers scientific evidence that is available in the VHL related to the context of the patient's clinical history.

BRISA

Regional database of Health Technology Assessment Reports of the Americas.

https://sites.bvsalud.org/redetsa/brisa

LEYES

Health legislation in LA&C countries. https://sites.bvsalud.org/legislacion

REA

Open educational resources in health sciences https://sites.bvsalud.org/rea/bireme

In-person and online courses

Training resources on information management, knowledge management, access and use of information and scholarly communication in health, through online courses available in the Virtual Campus for Public Health. https://www.campusvirtualsp.org/

CRICS

Regional Congress on Health Sciences Information. https://www.crics10.org/

ANNEX 2 - Main events in which BIREME has participated in 2020

- Webinar "*Año Internacional de los Profesionales de Enfermería y de Partería*", Organized by PAHO/HQ. May 19th, 2020.

- Launching of e-BlueInfo App in El Salvador, about COVID-19. May 21st, 2020. Organized by *Instituto Nacional de Salud* in El Salvador and PAHO/WHO El Salvador.

- International Symposium on the contributions of TCIM in the context of the Covid-19 pandemic. July 11th, 2020. Organized by TCIM Americas Network.

- I Entomology Journal Editors Meeting. July 15-16th, 2020. Organized by Embrapa.

- Launching of the Nursing Window of Knowledge on COVID-19. July 28th, 2020. Organized by the International Nursing Network.

- Launching of a special supplement on COVID-19 of the *Revista Argentina de Salud Pública*. August 5th, 2020. Organized by the Ministry of Health of the Nation, Argentina and PAHO/WHO Argentina.

- 1ª Meeting of e-BlueInfo Advisory Committee. August 26th, 2020. Organized by BIREME/EIH.

- Launching of the new DeCS/MeSH portal. September 18th, 2020. Organized by BIREME/EIH.

- Launching of the Nursing Window of Knowledge in Latin America and the Caribbean. September 22nd, 2020. Organized by the International Nursing Network.

- Peer Review Week at the *Universidade Federal de Alagoas*. September 25th, 2020. Organized by the Graduate Program on Information Science at UFAL.

- Launching of the TCIM-COVID-19 Window of Knowledge. October 6th, 2020. Organized by the TCIM Americas Network.

- Launching of the El Salvador VHL Portal. October 9th, 2020. Organized by the *Instituto Nacional de Salud* of El Salvador and PAHO/WHO El Salvador.

- 2nd Week of Colombia VHL, 35 years of LILACS and 23rd National Conference for Updating and Training of Health Information Units-UNIRECS: Knowledge management, science and health for all. October 14th, 2020. Organized by the National Coordination of Colombia VHL.

- 6th Congress of Science and Technology PUC Goiás. October 23rd, 2020. Organized by PUC Goiás.

- 35th LILACS anniversary: Solidarity is sbout sharing. October 29th, 2020. Organized by BIREME/EIH.

- Webinar Contributions of the TCIM to the strengthening of the immune system. October 31st, 2020. Organized by the TCIM Americas Network.

- 15th Conference on Health Informatics - JIS Go Live 2020. November 2-4, 2020. Organized by *Hospital Italiano de Buenos Aires*, Argentina.

- 35th International Scientific Congress. November 11-14, 2020. Organized by Felsocem.

- ACURIL 2020 Virtual Conference: Virtual Health Content Area Round Table. Organized by: ACURIL and MedCarib. November 18th and 19th, 2020.

- Global Library Group Meeting. November 18th and 19th, 2020. Organized by WHO.

- Webinar 50th CLAP anniversary. Organized by CLAP and BIREME. November 25th, 2020.

- 4th Scientific Journey of Goias Health State Secretariat. December 8-10, 2020. Organized by SES-GO.

- 2020 Meeting of Peruvian Biomedical Journal Editors. December 11th, 2020. Organized by the Instituto Nacional de Salud.