

Bilateral Cooperation in Health between Cuba and the United States: Scope and Limitations

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Abstract

Health cooperation relations between the United States and Cuba were conducted at the level of non-governmental organizations, scientific societies, universities, friendship associations, solidarity groups, etc., but were nonexistent at the governmental level. We had to wait for the Obama administration to materialize some cooperation actions between specialists in the fight against the Ebola epidemic in Central Africa in 2014 and during the earthquake in Haiti. It was not until after December 17, 2014 with the announcement by the presidents of both countries of their willingness to begin negotiations to restore diplomatic relations that a political and health rapprochement began, producing in 2016 important actions and exchanges never before achieved. Starting in 2017, with the beginning of the Trump administration, a sharp decrease occurs, until it disappears completely. The main cooperation actions carried out and the most significant examples are mentioned, including the drive of scientists and researchers from both countries to materialize them. A chronological retrospective description of the main activities and their results is included, something historic, never before achieved. The change of administration affected the level of cooperation, paralyzing a promising and beneficial future for both parties.

Keywords: *cooperation, exchanges, memorandums of understanding*

Chronological development of cooperative relations

Relations prior to December 17, 2014.

In the governmental area, they focused on the visits of officials from the Center for Disease Control and Prevention (CDC) in Atlanta to Cuban health institutions as part of the medical checkup program for Cuban travelers to the United States.

The non-governmental area was characterized by exchanges with some universities and institutions, private hospitals, the development of specialized medical exchanges through non-governmental organizations (NGOs), such as MEDICC (Medical Education Cooperation with Cuba) (Sanchez, 2015) and medical associations, such as the American Public Health Association and the Cuban counterpart (Ochoa Alonso, 2020), among others.

Also, NGOs that obtained special permits to make specific donations to the National Health System (SNS), such as: Caribbean Medical, Disarm Education Fund, Global Link, Lions Club and others. Scholarships were granted to low-income Americans to study medicine in Cuba, as part of the program proposed by the Commander in Chief,

Fidel Castro, to the U.S. Congressional Black Caucus and the NGO Pastors for Peace (Oncubanews, 2022), which sent the first students to the Latin American School of Medicine (ELAM).

Relations after December 17, 2014

When the presidents of Cuba, Army General Raul Castro Ruz and the United States, Barack Obama, announced the results of bilateral talks and the willingness to begin negotiations to restore diplomatic relations between the two countries (Cubadebate, 2014), relations between the Ministry of Public Health (Minsap) and the U.S. Department of Health and Human Services (HHS), experienced significant growth both quantitatively and qualitatively, in the development of scientific and academic exchanges between professionals and experts from both countries.

Relations during 2015: The beginning

An official from the U.S. Department of Health and Human Services (HHS) visited us and participated for the first time in the International Convention "Cuba Health 2015", then Head of the Office for the Americas of the HHS Global Office, responding to the invitation extended to the Ministry of Health by the Cuban Minister of Health.

In June 2015, Minsap received the visit of the Deputy Advisor for Science and Technology to the Secretary of State, leading a delegation of HHS and CDC officials from Atlanta, with the aim of exploring possibilities for cooperation, holding visits to health centers and conducting fruitful exchanges with officials and scientists.

In October 2015, Cuban experts were invited to participate in the 64th Annual Meeting of the American Association of Tropical Medicine and Hygiene (ASTMH) and the Pan American Health Organization/World Health Organization (PAHO/WHO). A Symposium was devoted to discussing the prospects for collaboration between Cuba and the U.S., under the theme, "Building Bridges through Health". This visit had a great impact due to the high level exchanges held and the very good acceptance of the American scientists Ameijeiras (HHA). First official Cuban visit to this renowned institution

In November 2015, Minsap executives visited the CDC in Atlanta, responding to an invitation from the U.S. side. The Cuban delegation was headed by the National Director of Epidemiology, accompanied by other specialists from the "Pedro Kouri" Institute of Tropical Medicine (IPK) and the head of the Imaging Department of the "Hermanos Ameijeiras" Hospital (HHA). First official Cuban visit to this prestigious institution.

Relations during 2016: Historical development of bilateral actions

A delegation headed by the First Deputy Minister of Health and made up by managers and specialists from different health centers such as: IPK, National Institute of Hygiene, Epidemiology and Nutrition (INHEN), Oncology and National School of Public Health (ENSAP), visited the USA in March 2016, responding to an invitation from the HHS. They were received at the Department of Health headquarters by the Under Secretary and other senior officials. They toured the National Institutes of Health (NIH) and visited CDC Atlanta, being attended by the top executives.

For the first time, two Cuban professionals, Presidents of the Commissions of Medical Checkups participate, invited by the organizers of the US CDC, in the Intergovernmental Summit of the International Training Association for Panel Doctors, held in March 2016, in Prague, Czech Republic.

A delegation of cancer specialists from the CDC and the NIH also visited Cuba to participate in the Cancer Workshop held between the Cuban Academy of Sciences and the American Association for the Advancement of Science (AAAS) in May 2016.

In the month of June, a historic visit takes place, when the United States Secretary of Health invites the Cuban minister, who is received on the first day by his counterpart. He fulfilled a program of meetings and exchanges with the Secretary of Health and other officials. He visited the NIH and other health centers. (Morales, 2016) A framework Memorandum of Understanding was signed for the first time in history for collaboration between MINSAP and HHS, on issues such as arboviruses, chronic diseases, aging and others (Calvo, 2016).

But furthermore, in the month of October, the U.S. Secretary of Health and Human Services makes a bilateral visit to Cuba where he toured health centers. A new Memorandum of Understanding was signed with the Minister of Public Health, specifically for cancer, due to the interest of both countries in cooperation in such a prioritized issue (Fariñas Acosta, 2016).

In addition, the Secretary participated in the Regional Meeting on Arboviruses Cuba-USA-PAHO/WHO, with a large delegation of North American specialists. The Secretary of Health and Human Services, the Director of PAHO, together with the Cuban Minister presided over that event, where delegations from more than 20 countries of the region were present, including six ministers (Domínguez Cruz, 2016).

Another significant moment was the holding in Havana of a meeting on tropical diseases between the "Pedro Kouri" Institute of Tropical Medicine and American institutions (NIH, CDH, HHS and others), with the presence of Dr. Anthony Fauci, Director of the US National Institute of Allergy and Infectious Diseases, from November 28 to 30, 2016, which meant the first visit to Cuba of this prestigious scientist.

Almost closing the year, in mid-December, we were visited by the Assistant Secretary of the Department of Health and Human Services along with other officials. She participated in the event on biotechnology and the use of Hebertprot-P, in Varadero, and toured the Medical University of Matanzas, a polyclinic, a medical office and held talks with executives of the Ministry of Health.

That year, work also began on a project proposal presented by the University of Illinois entitled, "Intercultural Alliance to evaluate the effectiveness of two models of health care delivery in low-income populations". It had its origin in the visit and participation of Dr. Robert Winn, Associate Vice Chancellor for Community Health Practices and Director of the Cancer Center of the University of Illinois, in the 2015 Health Convention and its exchanges in polyclinics and health centers. (To be expanded later).

Relationships in 2017: Total decline in activities

The year coincides with the beginning of the Trump administration, there are changes of officials and policies, almost from the start the exchanges that had been taking place are stopped and governmental relations in health are paralyzed. No exchange actions at the level of ministries of health are materialized, despite the full validity of the memoranda of understanding signed and the commitments reached in 2016.

In the non-governmental sphere, exchanges continued to take place, although in smaller numbers, between universities, associations, researchers, scientists, as a sign of the interest of this sector of the population in maintaining and promoting relations in this field, despite political obstacles. Some examples are:

- Visit of professionals from Johns Hopkins University to the "Pedro Kouri" Institute of Tropical Medicine, to exchange on issues of sexually transmitted diseases, from January 16 to 20.
- Participation of North American professionals, in the International Course on Dengue carried out by the "Pedro Kouri" Institute of Tropical Medicine, from August 7 to 25, 2017.
- International Workshop on Laparoscopic Surgery of Morbid Obesity and Metabolic Diseases and meeting with the American Society of Endoscopic Surgeons in cancer treatment and novel techniques.
- Academic and professional exchange visit from Indiana John-Hopkins University, North Carolina, American Society of Northwest, Anesthesia Seminars and Minnesota among others.
- Scientific exchange workshop between professionals from the National Center for Minimal Access Surgery and the Institute of Robotic Surgery and Transplantology of Miami, USA.
- Training with international experts from Sparrow Hospital, Michigan, on topics of gynecological laparoscopic surgery, robotic surgery and advances in the use of new techniques.
- Visit of the Rotary Club, Florida, in which surgeries were performed on children with malformations (cleft lip), as well as participation in the National Workshop on Pediatric Maxillofacial Surgery.

- Exchange in the area of craniofacial surgery at the Cincinnati School of Medicine, performing surgeries on children with craniofacial malformations at the Calixto García Hospital.
- The Project "Intercultural Alliance between Minsap and the University of Illinois", agreed upon during the previous year, materialized with the stay of Cuban advisors for three months in Chicago. It was the first time that a group of Cuban specialists, in the health care area, collaborated with the U.S., in this case linked to the community, based on Cuba's experiences in Primary Health Care and the Maternal and Infant Program (*Granma*, 2017).

Relations during 2018, 2019 and 2020

During all these years there were no contacts at the governmental level, in spite of some proposals from our side to materialize actions, based on the two Memorandums of Understanding signed. These have not been repealed or denounced by any of the parties, so they remain in force.

This period was characterized by few but valuable exchanges at the non-governmental level, such as visits from universities, associations and solidarity movements, NGOs and others, with important donations and cooperation. The aggressive policy of the U.S. administration against our country prevailed, in addition to the Covid 19 epidemic, when no kind of cooperation was carried out either; on the contrary, the blockade and economic asphyxia against Cuba intensified, with serious effects on health at such a sensitive moment in need. (Puig Meneses & Perera Robbio, 2023).

Most significant examples of cooperation in health care between the two countries

The cooperation actions with the "Pedro Kouri" Institute of Tropical Medicine (IPK) have always been and are of great interest to the U.S. government, because they recognize the strengths of this institution, its scientists and researchers, who can contribute with their experiences to strengthen the structures and containment programs to prevent the entry of tropical diseases such as Dengue, Zika and Chikungunya, among other arboviruses, to that country, especially to the Southern States. In the last few years, the interests among scientists and researchers have remained related to Covid-19 and even more in the preparation of our countries to face new epidemics.

The exchange relations and mutual recognition and identification between scientists and researchers, and the interest in promoting cooperation between both parties, in the face of common health hazards, have prompted policy makers to develop concrete actions, demonstrating the value of health in the interest of our peoples, as well as validating that global health and health and scientific diplomacy are decisive tools to achieve common goals (Pastrana et al. 2018). North American scientists repeatedly highlight and praise the level reached by Cuban medical science (Johnson, 2021).

Collaborative actions with the IPK, the most important example

Among the main actions carried out by this institution are technical missions of Cuban professionals to the United States such as: meetings on Tuberculosis (TB/PAHO), visits of Cuban professors and scientists to the University of Texas, at different moments during the year.

Numerous visits were received from professionals from the United States such as the editors of Nursing Journals and Science Magazine, a delegation from the CDC of Atlanta for the Gonococcus and Tuberculosis Laboratory, from the Medical College of the University of Florida. Also different groups of students and professors from universities such as Indiana University, Colorado School of Public Health, Tulane University, University of San Francisco, University of Minnesota, North Western University and Michigan State University.

In addition, courses and events where delegations of American professionals participated such as: the BSL2/BSL3 (Biosafety) theoretical and practical course, the 15th International Dengue Course, which is held every two years, (Fariñas Acosta, 2017) the Symposium "New advances in our knowledge of the biology of *Aedes Aegypti* and its control", organized by the American Association for the Advancement of Science (AAAS), Johns Hopkins University and the IPK and with the presence of Prof. Peter Agre, Nobel Prize in Chemistry, 2003, the 80th Anniversary Congress of the Institute of Tropical Medicine, IX Cuban Congress of Microbiology and

Parasitology, VI National Congress of Tropical Medicine, VI International Seminar on HIV Infection and AIDS in Cuba, 5th International Symposium. Chromoblastomycosis: A neglected disease.

Work began on a proposal for several specific cooperation projects "U.S.-Cuba Collaborative Arbovirus Research Initiative, in 2017" between the IPK and different institutions of the United States, including topics of virology, immunology and vectors.

In 2018 exchanges continued, although in smaller numbers, notably the "Course on the importance of institutional committees for the care and use of laboratory animals" (CICUAL), with the development of a research protocol involving experimental animals for studies of infectious diseases, and the Workshop "The impact of CICUAL in research with laboratory animals"; participation of a renowned professor as a lecturer in the "XVII Meeting of the Ibero American-Cuba Cochrane network 2018"; participation of a prestigious professional in the "Scientific Exchange on the implementation of Wolbachia, as a promising tool in the control of the A. Aegypti mosquito in Cuba"; and the participation of U.S. professors from the University of Ohio in the Symposium on Infectious Diseases: 'Immunology and New Therapies'.

In 2019 the Qualitative Research Course of the Master's Degree in Epidemiology was held, and the scientific exchange and collaboration for the thematic research on HIV/AIDS continued, where a professor from the University of North Carolina participated as an expert on these topics. IICA again received participants for the "16th International Course on Dengue, Zika and other Arboviruses" and held the workshop Frontiers in the Application of Ozone, with the participation of a large number of U.S. professionals. That year, a paper was published in cooperation between both parties on research related to the transmission and evolution of Zika. (Gutierrez-Bugallo, G. *et al.* 2019).

In 2020 the actions continued to show the downward tendency. However, the XIII Course on Travel Medicine and Tropical Medicine and the Technical Workshop on biosciences in research and treatment of the Covid-19 pandemic, carried out between experts from Cuba and the United States on coronavirus issues, were held.

In 2021, as a new modality, virtual exchanges (Virtual Forums) were held between the IPK-NIAID, which we consider to be the action that had the greatest impact after the decrease in actions due to Covid-19. It was the only one of a bilateral nature between governmental institutions, a space where experiences in the management and control of Covid-19 and the development of vaccines in both countries were exchanged. This action was inserted in the objectives proposed in the health memoranda signed in 2016.

During 2022, at the request of the US side, an important Cuba-US virtual meeting was held with the participation of the State Department, HHS, NIH, and Cuban officials from Minrex, Minsap, IPK and other experts were present. Cuban specialists made brief presentations on the main arboviruses. The interest of the U.S. side to exchange and learn about these topics was evident. It was agreed to continue with other similar activities.

2023 it was a more active year in the field of exchanges and virtual conferences between the National Institute of Allergy and Infectious Diseases (NIAID) and the IPK, together with other specialists from Minsap and BioCubaFarma, according to the topics they addressed: arboviruses, anti-pandemic preparedness and neurological diseases among others, aimed at achieving greater knowledge and updating among scientists from both countries.

In March, Minsap authorities and IPK specialists held a working meeting with HHS and NIAID officials. As a result of this scientific meeting, the parties agreed to continue working on the implementation of the Memorandum and to promote technical exchanges related to research on arboviruses, COVID-19 experiences and other topics (*Cubadebate*, 2023).

Days before that, a delegation of American scientists from different institutions like the Association for the Advancement of Science (AAAS), research institutes (NIH), universities and others held a fruitful meeting with Cuban counterparts from the Academy of Science, the Ministry of Public Health, BioCubaFarma, IPK and others to discuss science, innovations, biomedical research and the challenges for both parties (*Granma*, 2023).

It should be noted that joint research and publications did not stop despite the absence of face-to-face meetings. That is why, based on what was agreed in 2016 - 17 and the interest of the parties, especially with universities, several of them were realized, notably one on dengue and another on aedes. Two groups of IPK authors and North American specialists materialized both publications (Piedra *et al.* 2023).

The year 2024, from February 14 to 16, marked a resumption of face-to-face actions, with the II Joint Cuba-United States Scientific Conference on Health, "Addressing global health challenges through innovation and scientific research" (*Prensa Latina*, 2024).

This event, which was being organized since 2023, had several previous videoconferences on specific topics of interest to the parties such as arboviruses, pandemic preparedness, neurological diseases, aging, among others, as well as for the preparation and selection of scientists and researchers who would be the speakers. There was support from other institutions such as PAHO, MEDICC, Academy of Sciences of Cuba, BioCubaFarma and several centers and universities in the USA and Cuba, although the central organizational core was the IPK and NIAID. There was ample participation with some 150 delegates, including 37 North American specialists and scientists.

The three days of the event were dedicated to the topics of arboviruses, anti-pandemic preparedness, advanced health technology (omics and genomics) and chronic diseases (cancer, ataxia, cardio-metabolic diseases, aging, neurological diseases and COVID-19). Fifty-two lectures were presented and one session was dedicated to identifying new topics for collaboration. In the week following the meeting, two press releases were issued by each side, referring to the meeting.

The U.S. delegation included Dr. Maria Cristina Cassetti, Deputy Director of the Division of Microbiology and Infectious Diseases at NIAID/NIH, Joyelle Dominique, Director of the Global Office of Research at NIAID/NIH, Mackenzie Klein, Senior Officer for Global Health at the Department of Health and Human Services (HHS), and Dr. Steve Whitehead, Microbiologist and Principal Researcher in the Arbovirus Vaccine Research Section, Laboratory of Viral Diseases at NIAID/NIH.

The four projects preliminarily approved in 2017, related to arboviruses topics, were ratified and finally it was agreed to carry out joint publications for high impact journals and to continue the collaboration with new virtual sessions on the topics identified during the conference, to advance in the development of new projects with the IPK and to organize a similar scientific activity in the USA. Since then, two virtual sessions have already been held, one on the topic of Tuberculosis and the other on Antimicrobial Resistance. The event was also an opportunity to stimulate and encourage the completion in 2024 of a publication on research related to the immune response to dengue virus (Granel *et al.* 2024).

"Cross-Cultural Partnership to Evaluate Effectiveness of Two Models of Health Care Delivery in Underserved Populations in Chicago" project. Another significant example of collaboration

The development of this project was based on the Cuban experience in Primary Health Care, where specialists of General Comprehensive Medicine of Cuba, responding to a request made by the University of Chicago to the Ministry of Health, visited the city to evaluate the possibilities of cooperation with the clinics served by that university, to apply the Cuban experience in community care and thus contribute to improve the health indicators of low-income populations of African American and Latino origin, mainly related to the Maternal and Child Care and Cancer Prevention Program. (Carey J. 2017).

The proposal arose after a visit to Cuba in 2015 to participate in the Health Convention of a delegation led by Dr. Robert Winn, associate vice director of community health practices and director of the University of Illinois Cancer Center. They visited first level institutions, i.e. polyclinics and doctor's offices, among others, where they appreciated the attention focused mainly on health promotion and prevention. When comparing the health indicators between Cuba and Chicago, they found that Cubans are better off than those in Chicago, especially the indicators related to the less favored and developed areas of the city.

They then came up with the idea of collaboration and proposed a project so that Cuban doctors could advise on community care in the neediest areas. Dr. Winn, pointed out that the Cuban Health System undertakes preventive health care very satisfactorily and with few financial resources (*UIC Today*, 2017).

After two more visits to Cuba, he presented his proposal which was approved, with the first three doctors traveling in early January 2017. They did an initial preliminary survey of the health situation for just over a week. Subsequently, at the end of October, four advisors traveled to work in the Englewood area, with a population of about 25,000 inhabitants and a life expectancy of 72 years.

To carry out this activity, the Health Situation Analysis used in the Family Medicine Program in Cuba was used as a working tool to diagnose the health status of these communities and expectations and actions for the future continuity of the intervention were outlined. It was demonstrated that this tool - used by our professionals- could be applied in a different environment and context to know the diagnosis of the health status of the Englewood community, projecting future actions to improve the results of the evaluated programs: Maternal and Child Care Program and Cancer Prevention.

With this project, for the first time in the history of U.S.-Cuba relations, a cooperation in health was officially established, with medical advisors working in the community together with U.S. professionals in their own territory. Again, this project could not continue beyond 2017 for the same restrictive political reasons of the Trump administration, despite the interest it created in other cities such as Detroit.

Results achieved

The main cooperation actions for years are highlighted, especially those in the governmental field, since the announcement by the President of Cuba and the United States, on December 17, 2024, of the will to reestablish diplomatic relations.

This allowed the Cuban Ministry of Public Health and the U.S. Department of Health and Human Services to have a rapprochement in their relations, which materialized in various actions such as exchanges, visits, scientific meetings, development of research projects and other activities that were visible for years. Sadly, very little time was available to pursue that course, which was practically only the year 2016. Although the commitments reached, such as the signing of the two Memoranda of Understanding, remain in force and with full legal validity by both countries, will allow - provided there is political will - to once more develop cooperation actions of interest and benefit for both parties. All of the above illustrate what is sought in the relations between the peoples and governments of the United States and Cuba (Martínez, 2023).

In the body of the work, the importance of two examples of collaboration stands out for their scope and projection. The first is everything that the IPK carried out with different North American institutions, and the second is the first project of technical consultancy in health developed with the University of Illinois.

The background in the first case includes several collaborations with universities and non-governmental institutions, but above all the level and priority attained after 2016 with the relations established with the NIH, fundamentally with the NIAID, with full identification of interests and objectives, which were guided and driven by the ministries of health of both countries and by the current issues involved in such cooperation. The number of actions carried out over the years, also expresses a common spontaneous desire to collaborate, driven by the full awareness and knowledge of scientists, researchers and officials, of the importance of the joint confrontation of diseases for Cuba and the U.S., and even for the globalized and interdependent world in which we live today.

The other outstanding example was the collaboration project with the University of Illinois for consultancy in primary care and maternal and child health activities in low-income African-American areas with unfavorable health indicators.

It was the first time that Cuban advisors went to work as health collaborators in U.S. institutions, and even in the community. It was of great impact and ended in 2017 with the development of the initial stage, which lasted several months, but then the new U.S. administration did not allow its continuation.

Conclusions

The work here presented demonstrates the potential and the wide field of cooperation existing between Cuba and the U.S. in health, with a great future for the development of scientific, academic, research, training and experience exchange activities, including in the field of health care.

A remarkable fact is that, despite the steely economic, commercial and financial blockade of the U.S. against Cuba and the many obstacles, limitations, prohibitions and sanctions, over the years, different health institutions and/or organizations such as universities, medical associations, NGOs, research centers have managed to carry forward various cooperation actions between both countries. These are the cases of MEDICC, Pastors for Peace (American students at ELAM), universities such as the University of Florida, Indiana University, Colorado School of Public Health, Tulane University, University of San Francisco, University of Minnesota, North Western University, Michigan State University, among others.

In that sense, when in 2014 the process of diplomatic rapprochement and cooperation relations began, health was precisely one of the sectors that advanced most rapidly with specific actions and activities that included visits of the Cuban Minister to the U.S. and of the Secretary of Health of that country to Cuba. The signing of two Memorandums of Understanding on that occasion was considered historic, as it had never been achieved before. This facilitated the realization of projects and exchanges of great value and interest for both countries, as described in this work. It was as if the repressed or forbidden desire or need of scientists and researchers were released all at once with great drive and energy.

We believe that the interest in relations that always existed in spite of the blockade, together with the official authorization of the government, with activities at the governmental level, made possible the progress achieved in cooperation in just over a year. The change of administration again imposed limits, but what was achieved demonstrated all that can be done between the two countries for the good of health for all. The paths are already known and the conditions exist to continue advancing in the non-governmental field, with the drive of scientists and friends. In the governmental field, we are ready to take an enormous leap forward based on the experience of what was achieved in the Obama Administration, if the required political will exists.

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