Research report:
Outcome Evaluation of the Edmundo Granda Ugalde Leaders in International Health Program
2008-2012

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Pan American Health Organization

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ABBREVIATIONS

LIHP: Edmundo Granda Ugalde Leaders in International Health Program

Mercosur: Southern Common Market

NGO: nongovernmental organizations

PAHO: Pan American Health Organization

UNASUR: Union of South American Nations

VCPH: Virtual Campus for Public Health

WHO: World Health Organization

ACKNOWLEDGMENTS

1
INTRODUCTION

Leaders in the health sector face enormous challenges imposed by the current global environment, which is characterized by increasing complexity and constant change. The growing interdependence among nations, opening of borders and markets, introduction of new technologies, movement of populations, and spread of emerging and reemerging diseases, among other factors, are placing new and urgent demands on States. Leaders are increasingly required to formulate and implement actions that take into account the bilateral and multilateral treaties and agreements that their countries have signed. They must also comply with regional and global goals and mandates in an environment made up of new and emerging actors, structures and alliances that require intersectoral and international action to achieve equitable and collective health outcomes and sustainable development for their populations.

Despite the magnitude of these problems, several countries in the Americas have experienced a reduction in the role of the State and a weakening of national health systems and human resources, which limits their response capacity. The decentralization of public health functions has not always been accompanied by training and continuing education for the public health workers responsible for these functions, contributing to a loss of national or international perspective. Additionally, there is often little or no interaction between the ministries of health and foreign affairs, which leaves regulatory bodies poorly equipped to solve health problems. Crises such as those caused by the Zika virus epidemic, Severe Acute Respiratory Syndrome (SARS), the influenza A (H1N1) pandemic of 2009, and others require coordinated action and response, both within and among nations, to guarantee the safety of all people. Leaders are needed in different sectors and at all levels to facilitate the development and implementation of policies and programs that are based on sound analysis, effective in their execution, and which reflect the unique situation, culture, and values of their target populations.

For over 30 years, the Pan American Health Organization (PAHO) has contributed to the development of such leadership. In this regard, it is important to mention the International Health Program, also known as the Residency in International Health, which was created in 1985 as an onsite program and lasted for 21 years, training 187 professionals from 32 countries. It was relaunched in 2008 with both face-to-face and virtual components as the Edmundo Granda Ugalde Leaders in International Health Program (LIHP), which was conceived with the objective to

> *… contribute to the attainment of the Health Agenda for the Americas 2008-2017 by strengthening the capacity of countries in the Region to understand, act upon, and positively influence international determinants of health, to promote their national interests and to achieve intersectoral health agreements in international environments, at all times guided by the principle of greater global equity in health (1).*

As of 2012, 225 people from 32 countries of the Region had benefited from the new version of the program. The LIHP is aimed at mid- and high-level managers and administrators, as well as directors who perform executive functions in ministries of health, development, finance, foreign affairs and others, in addition to PAHO staff members, and professionals from other multilateral and bilateral agencies, regional integration entities, academia, and nongovernmental organizations (NGO). The program encompasses eight to nine months and takes place in the participant's home country under the direction of the Program Coordination and the Pan American Health Organization/World Heath Organization (PAHO/WHO) country office. The participants undertake virtual learning activities and basic modules on the theories and key practices of international health. They complete thematic modules in which they analyze specific public health issues from an international health perspective. They also develop an international health project related to a priority area in their country or region. This is done in coordination with PAHO/WHO, their government, and other authorities. The results are presented upon completion of the program.

The LIHP is based on a conceptual model of international health that seeks to explain the growing complexity of the processes of health and illness in an environment of regional geopolitical transformation and globalization, by analyzing the impact of the main factors influencing equity in health. This conceptual model provides a methodological framework that guides the participants' international health projects as well as the virtual learning modules.

Furthermore, the program has defined a set of knowledge, skills, attitudes, and values associated with the theory and practice of international health, which have been organized into a system of competencies. This system was initially designed by a group of experts in international health, international relations, health policy, and pedagogy during the Methodological Workshop for the Development of the Leaders in International Health Program held in Panama City in 2008.[1] The competencies are geared toward ethical principles and the values of equity, solidarity, social justice and the right to health.

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1   Pan American Health Organization. Executive Summary of the *Taller Metodológico para el Desarrollo del Programa de Líderes en Salud Internacional* 2008. Panama City, 2008 Jan 30-Feb 1; [unpublished].

Core, specific, and cross-cutting competencies have been defined.

The *core competencies* are comprised of a set of generic skills and abilities of an instrumental nature that all international health professionals need for satisfactory performance, especially in terms of communication, information and time management. The *specific competencies* (also called technical or specialized competencies) have to do with certain occupations or functions. These correspond to the knowledge and know how regarding a set of models, theories, methods, and specialized techniques related to a given discipline or field. The *cross-cutting (or central) competencies* refer to abilities or attributes common to all international health professionals. They are strategic and broad in their perspective and integrate and enhance the potential of the competencies previously mentioned, enabling greater action and capacity for response in international health both from within and outside of one's discipline or field.[2]

The cross-cutting competencies *(2)* have formed the basis of the pedagogical work of the LIHP to date and maintain their relevance after being validated during the Consultation of Experts Meeting in Washington, D.C. in December 2015[3] (Table 1).

TABLE 1.	Cross-cutting competencies of the Edmundo Granda Ugalde Leaders in International Health Program (LIHP)
1	Situational analysis: the ability to analyze a situation in-depth so as to intervene successfully
2	Policy design and decision-making: the capacity to develop and influence policies and strategies conducive to human life and health
3	Negotiation and advocacy: the ability to understand and lead processes of change in relation to a common problem or challenge faced by different groups or institutions
4	Project management and cooperation: the ability to develop and establish relationships and reach collaborative agreements that are mutually beneficial in order to achieve specific objectives
5	Generation and exchange of knowledge: the ability to develop and communicate innovative information about international health
6	Communication: the ability to formulate an argument and communicate it effectively to key stakeholders in order to achieve a desired outcome

2 Pan American Health Organization. General Program for LIHP. 2015. [unpublished].
3 Pan American Health Organization. Aide Memoire Consultation of Experts Meeting Edmundo Granda Ugalde Leaders in International Health Program, Washington, D.C., 2015 Dec 3-4; [unpublished].

The LIHP is considered to be unique in terms of its conceptual and educational approach, which prioritizes collective learning and networking. Its position within an intergovernmental organization such as PAHO/WHO is a distinctive feature of this program, and offers the participants many opportunities for exchange, dialogue, and the application of knowledge.

2 JUSTIFICATION

The LIHP entails an investment of resources (time, human, and financial) of many stakeholders inside and outside of PAHO. This is primarily due to the decentralized nature of the program, as well as the existence of a learning model that requires active collaboration and exchange with numerous entities and persons.

An external evaluation conducted in 2010, which focused on the learning process for the 2008-2009 cohorts,[4] and the annual internal program evaluations have shown that the program effectively strengthens the international health competencies of professionals engaged in health, development, and international relations. Many graduates came to occupy strategic posts within their national ministries, international organizations, bilateral agencies, the academic community, and NGOs, in addition to being prominent and active figures in the international health arena.[5] The knowledge gained from the program is evident in scientific publications, the development of new educational processes, and new academic programs on international health, global health diplomacy, and other related subjects. Despite this progress, there is a recognized need to continue to strengthen leadership capacity in international health in the Americas.[6]

Many authors and academics note how difficult it is to demonstrate the long-term impact of learning processes and programs, particularly when they seek to develop capacities and even more so when the intention is to attain an impact beyond those enrolled in the course and positively influence broader entities—e.g. institutions and countries—as well as high level processes or goals *(3-7)*. Multiple factors affect this: the constantly evolving historical, economic, political, social, and cultural environment in which the actors operate; the existence or not of conditions—both structural and systemic—that favor the application

4   Pan American Health Organization. Evaluación externa del Programa de Líderes en Salud Internacional Edmundo Granda Ugalde: Ediciones 2008 y 2009. Final report; [unpublished].
5   Pan American Health Organization. El Programa de Formación en Salud Internacional: una aproximación a las percepciones sobre su pertinencia, 1994; [unpublished]. Pan American Health Organization, Unidad de Desarrollo de Recursos Humanos. Una mirada al Programa de Formación en Salud Internacional de la Organización Panamericana de la Salud, 2003; [unpublished]. Pan American Health Organization. El Programa de Formación en Salud Internacional de la OPS/OMS (PFSI) y el rol de la OPS/OMS en el desarrollo de liderazgo individual e institucional en salud internacional, 2006; [unpublished].
6   Pan American Health Organization. El Programa de Formación en Salud Internacional de la OPS/OMS (PFSI) y el rol de la OPS/OMS en el desarrollo de liderazgo individual e institucional en salud internacional, 2006; [unpublished]. Pan American Health Organization, Human Resources Development Unit. PAHO's Strategic Role in Developing International Health Leaders, 2007; [unpublished].

of the acquired competencies; the positions held by training program graduates within their institutions and the degree of power or influence they exercise; and whether the timing is right for bringing about change. All these factors coexist within a complex and ever-changing environment.

In view of the above, an evaluation was conducted of the program's *outcomes*. It focused on application of the competencies acquired by the program graduates in their professional environments. It also assessed the general objective of the LIHP and its relevance, in accordance with the current regional and global context. This evaluation enabled the identification of the program's strengths and weaknesses, which will help the coordinators implement recommendations to improve future quality and relevance.

The study was designed to answer the following question: What are the short- and medium-term outcomes of the Edmundo Granda Ugalde Leaders in International Health Program (LIHP) for the 2008-2012 graduates within their professional environments? The information provided by this study will facilitate the development of recommendations to improve the quality of the LIHP.

This report offers a timely, strategic, and necessary opportunity to evaluate and improve the quality of the program. The LIHP has sufficient and valuable information to assess its outcomes, quality, and relevance. The importance of interinstitutional and interprogrammatic collaboration, together with the current fiscal environment in which many international institutions operate, are key to establishing new partnerships. Hence, it is essential to provide valid, reliable data to demonstrate the outcomes of the program to current and potential partners and donors.

In addition, some academic institutions in the Region have expressed an interest in offering international health courses based on the experience and learning modules of the LIHP, and PAHO is supporting these initiatives. An assessment of the results will help guide this effort by showing what has worked in the past and how to best direct efforts in the future.

3

CONCEPTUAL FRAMEWORK

3.1. Relationship between the LIHP and PAHO's mission, objectives, and priorities

The mission of PAHO is "to lead strategic collaborative efforts among Member States and other partners to promote equity in health, to combat disease, and to improve the quality of, and lengthen, the lives of the peoples of the Americas" *(8)*.

Among its priorities and technical cooperation strategies, PAHO promotes the development of human resources for health. The main objective of the Human Resources for Health Unit is to *(9)*:

> *. . . strengthen the health workforce through: technical cooperation to improve human resources for health management and planning at the ministerial and local levels; **the development of human resources capacity and leadership through innovative programs for education and training** geared towards Primary Health Care; and the promotion of programs and policies to motivate and retain health workers through the Organization's cooperation activities [bold added].*

The LIHP helps achieve the main objective of the Human Resources for Health Unit, precisely by developing capacity and leadership in the countries of the Region.

One of PAHO's technical cooperation strategies and tools to achieve this objective is the Virtual Campus for Public Health (VCPH). It is characterized as a *(10)*:

> *. . . network of people, institutions and organizations that share courses, resources, services, and activities in education, information and knowledge management in training, with the common purpose of improving the skills of the workforce and practices of public health through the development and innovative use of information and communications technologies for continuous improvement in the performance of continuing education programs in health.*

As a training program offered through the VCPH, the LIHP embraces the *strategic model* of the Campus, which is comprised of seven components, including the educational model and evaluation model.

3.2   Educational model

A significant element in the VCPH educational model is the importance it assigns to transformational practices. According to this model, the educational intent is "to support the transformation of health practices and not to be merely an academic or technical exercise" *(11)*. It also indicates that participants are expected to "make decisions and formulate projects and intervention alternatives potentially usable in local work contexts. To this end it is important to facilitate activities involving reflective reading, situation analysis, experiences, case studies, problem solving, and problem-posing for complex practices" *(11)*. The VCPH also notes that learning in networks contributes to this transformation.

The LIHP learning model is consistent with this educational philosophy: it strengthens collective and network learning, problem-based learning, and the transformation of practices, set in the real contexts in which the participants work. This criterion is also espoused by other authors *(12, 13)*.

The LIHP curriculum has been designed to develop the cross-cutting competencies mentioned previously. The development of these competencies are the *outputs*, while *implementation of these competencies* are the *outcomes*—the object of this evaluation. At the same time, it is presumed that these *outcomes* contribute to the achievement of the objective of the LIHP (Figure 1).

3.3   Evaluation model and evaluations conducted

There have been numerous evaluations of the LIHP learning process, including annual evaluations of the learning modules and of the program as a whole. The 360 degree evaluation method was used for this purpose. Pre- and post-learning assessments have also been applied in some of the modules.

Furthermore, an external evaluation was carried out in 2010, which focused on the learning process for the 2008-2009 cohorts. Its main objective was "to evaluate the Leaders in International Health Program based on an analysis of quality variables for higher education courses offered through the Virtual Campus for Public Health and thus contribute to its enhancement."[4] The program also possesses a descriptive analysis of the LIHP participants between the years 2008 and 2011, which was prepared as an input for an evaluative process in 2011.[7]

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7 Carrasco C, Mejicano G. Análisis descriptivo de los participantes PLSI 2008-2011. Antigua, Guatemala; 2011 Nov 14-16; [unpublished].

FIGURE 1. Relationship between the inputs, process, outputs, outcomes, and impact of the Edmundo Granda Ugalde Leaders in International Health Program (LIHP)

Inputs	Process	Outputs	Outcomes	Impact
Human, financial, and material resources	Training program	• Development of competencies • Graduates that successfully complete the LIHP • Completed country projects • Development of international health academic network	• Competencies put into practice • Policies, projects, articles that include international health focus designed/developed by graduates • Advocacy efforts and negotiations related to international health promoted by graduates	Strengthening the capacity of countries in the Region of the Americas to understand, act upon and positively influence the international determinants of health, to promote their national interests, and to achieve intersectoral health agreements in international arenas, at all times guided by the principle of greater global equity in health

Although there is anecdotal evidence pointing toward some positive outcomes of the program—including its contributions towards the development of leadership among international health graduates, PAHO's technical cooperation, and the development of new international health learning processes in some countries of the Region—this study is the first to evaluate the outcomes of the LIHP per se.

3.4 Quality and relevance

There is an intrinsic relationship between the quality and relevance of educational programs: relevance is one of the criteria used to measure the quality of programs *(14, 15)*. The two concepts are so intertwined that one cannot exist without the other. Furthermore, relevance implies social responsibility, without which there is neither relevance nor quality *(16)*. An educational program can be excellent in some categories (have a good structure—team, faculty, platform, etc.—; provide very good instruction; or graduate 100% of students with honors), but if the curriculum does not respond to the issues and the social, political and economic needs of society, the program is not relevant.

Relevance is measured in both the social and academic arenas. A program has *social relevance* if it meets the expectations and needs of society; this is measured by the social impact that it engenders. A program has *academic relevance* if its theories are current, the knowledge and facts imparted are true, its principles have certainty, its values are legitimate, and the strategies and methods taught in the program are feasible. An assessment can target the educational process and the application of the acquired skills to resolve problems in the work environment *(16)*. Although both areas are important, this study focuses on academic relevance.

4 OBJECTIVES

4.1 General objective

Evaluate the short- and medium-term outcomes of the Edmundo Granda Ugalde Leaders in International Health Program (LIHP) between the years 2008 and 2012.

4.2 Specific objectives

● Assess the results of the LIHP in terms of the professional competencies acquired in the short and medium term by 2008 to 2012 graduates, based on the selected study variables.

● Make recommendations to improve the quality and relevance of the LIHP for the purpose of strengthening international health capacity in the Region of the Americas.

5 MATERIALS AND METHODS

5.1 Design

This was a retrospective, cross-sectional evaluation. The study's target population was LIHP graduates from the 2008-2012 cohorts. In order to measure the outcomes of the program *in its entirety,* LIHP participants from those years were included only if they successfully completed all the required components of the program. This includes those who completed the program during their cohort's year of study as well as those who successfully completed any pending requirements in a subsequent year.

5.2 Population

The population included a total of 201 graduates. Although sample size was not calculated, it was estimated that a minimum of 113 completed and usable questionnaires were necessary to attain a 90% confidence interval, with a positive assessment of quality and relevance at 0.6%, and a 5% margin of error.[8] The two sub-groups for the qualitative portion of the study were extracted from this population.

5.3 Data collection techniques

Both quantitative and qualitative data collection techniques were used for the study. A survey was used to collect quantitative data. English and Spanish versions of the survey were designed online through SurveyMonkey.[9] Portuguese-speaking participants were given the option of answering the questionnaire in either Spanish or English. The questionnaire consisted of 59 possible questions, which varied depending on their applicability to each respondent. Fifty-four percent (54%) of the questions were closed. Most of the open ended questions were used to delve into the responses to the closed questions.

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8 Sample estimated through the Epi-Info 7 Program. Available from: https://www.cdc.gov/epiinfo/
9 SurveyMonkey: free questionnaire software to create and publish surveys online in minutes and see the results graphically represented in real time. Available from: https://www.surveymonkey.com/

The questionnaire was validated with five participants from the 2013 cohort that met sample eligibility requirements. This validation was used to identify problems related to question wording, verify question importance, and ascertain the amount of time needed to complete the questionnaire. Validation findings were used to modify the wording of the questions and the options for response.

The following variables were used: a) participants' current and prior employment, including information about their institution, position and job responsibilities, occupational sector, and level of responsibility within the institution; b) data on fellowships and awards obtained; c) participation and responsibilities in professional associations; and d) publications.

To enhance response, an email was sent to all potential participants inviting them to take part in the study. Upon receipt of their acceptance along with a signed consent form, participants were provided with a link to the online questionnaire, which was available to them for three weeks. The researchers reviewed the responses to determine whether an adequate number of questionnaires had been received that were appropriately completed and eligible to be included in the study. Those who agreed to participate but did not fill out the questionnaire properly were contacted and asked to make necessary corrections. Questionnaires were identified with a unique code in order to protect participants' anonymity.

Group interviews were used to collect qualitative data in this study. To conduct them, a semi-structured guide was designed with seven open ended questions about the competencies acquired through the LIHP. The questions were phrased to obtain individual responses from each participant. The purpose of this process was to learn each graduate's perception of the program experience, identify the program's strengths and weaknesses, and gather recommendations for its improvement. The guide also delved into the application of the knowledge acquired, decisions or actions taken by graduates in their respective fields after completing the LIHP, and any limitations to applying knowledge gained.

Before the group interviews were conducted, they were validated with three people who answered the online questionnaire, but had not been selected for the group interview. This validation was used to refine the technological process for conducting the interviews and reduce the number of questions posed.

The interviewees were divided into two groups: graduates from the English-speaking Caribbean and Spanish-speaking graduates. Graduates were selected to be included in the groups based on distributions of country, gender, age group, and year of participation in the LIHP. Twelve or more program graduates were invited to each group interview, according to the aforementioned criteria.

The interviews were conducted using the Blackboard Collaborate software[10] for virtual conferences, a tool frequently used by the LIHP and therefore familiar to the graduates. Prior to the start of the session, it was confirmed that all participants had access to the required technology. The two interview sessions were recorded, with the knowledge and consent of the interviewees, through the MP3 Skype Recorder Blackboard Collaborate program, facilitated by the Institute of Nutrition of Central America and Panama (INCAP).

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10   Available from: http://www.blackboard.com/

Each group had a moderator and a rapporteur; the principal researcher did not attend these sessions to avoid introducing potential response bias.

5.4 Data processing and analysis

The quantitative data were exported from SurveyMonkey to Microsoft Excel files (1997 to 2003 versions) and were later processed through Statistical Package for the Social Sciences (SPSS) software, version 23. Quantitative data processing included the generation of new variables; univariate analysis and significance tests were used to verify the evolution of the variables.

Qualitative data analysis was done by systematizing the information gleaned from the audio recordings and transcriptions. A manual analysis tool was designed in Microsoft Word that took into account the application and impact of the six LIHP competencies on the occupational and professional activities of those interviewed. This enabled the researchers to establish similarities between the results of the quantitative and qualitative studies and integrate the findings to facilitate comparative analysis. The definition of the units of analysis (segmentation of information) enabled the researchers to delineate categories and analyze the responses according to the established categories. The responses according to these categories were then related, allowing the researchers to establish inferences between the two interview groups.

Quantitative and qualitative results were compiled using the triangulation convergence methodology.

5.5 Ethical considerations

The research protocol was submitted for review to the PAHO Ethical Review Committee (PAHOERC), which deemed the study exempt from ethical review. Participation was voluntary; all results were anonymous and treated confidentially; and each participant signed the informed consent form.

6 RESULTS

6.1 Description of the sample

The study sample consisted of 113 graduates who answered the online questionnaire. Graduates between 45 and 54 years old comprised the largest percentage (49.6%) of the sample, followed by the 35 to 44 year old age group (29.2%). Most (62.8%) of the graduates who participated in the study were women.

The vast majority (91.2%) of graduates indicated that they were employed at the time of the study, while 3.5% indicated that they were unemployed. Graduates from the Andean Region comprised 29.2% of the sample, followed by Central America with 19.5%, the Southern Cone with 18.6%, and the English-speaking Caribbean with 15.0%. It is important to mention that Cuba, the United States of America, and Mexico were also represented in the study, but comprised less than 10% of the participants.

The majority of graduates (52.2%) reported working in the medical field, followed by other health professions (23.9%). A smaller percentage reported working in political science, international relations, economics, and finance (Table 2).

TABLE 2. Description of the sample of graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015

Variable		Participants	%
Age groups	25-34	8	7.1
	35-44	33	29.2
	45-54	56	49.6
	55 or more	16	14.1
Gender	Male	42	37.2
	Female	71	62.8
Employed at the time of the survey	Yes	103	91.2
	No	4	3.5
	Other[a]	6	5.3
Region/Countries	Andean Region	33	29.2
	Central America	22	19.5
	Southern Cone	21	18.6
	English-speaking Caribbean	17	15.0
	Cuba	10	8.8
	Mexico	8	7.1
	United States of America	2	1.8
Graduate's reported profession	Medicine	59	52.2
	Other health professions	27	23.9
	Other professions	8	7.1
	Economics and finance	6	5.3
	Political science and international relations	4	3.5
	Education	4	3.5
	Law	3	2.7
	No data	2	1.8

[a] 6 participants responded Other: 3 were employed and 3 were not.

When stratified by gender, the age distribution was similar to that of the sample as a whole. Forty percent (40%) or more of the men and women who participated in the study were between 45 and 54 years of age

when they answered the questionnaire. Graduates younger than 34 years old comprised the smallest age group in the distribution (Figure 2).

FIGURE 2. Distribution by age and gender of the graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015
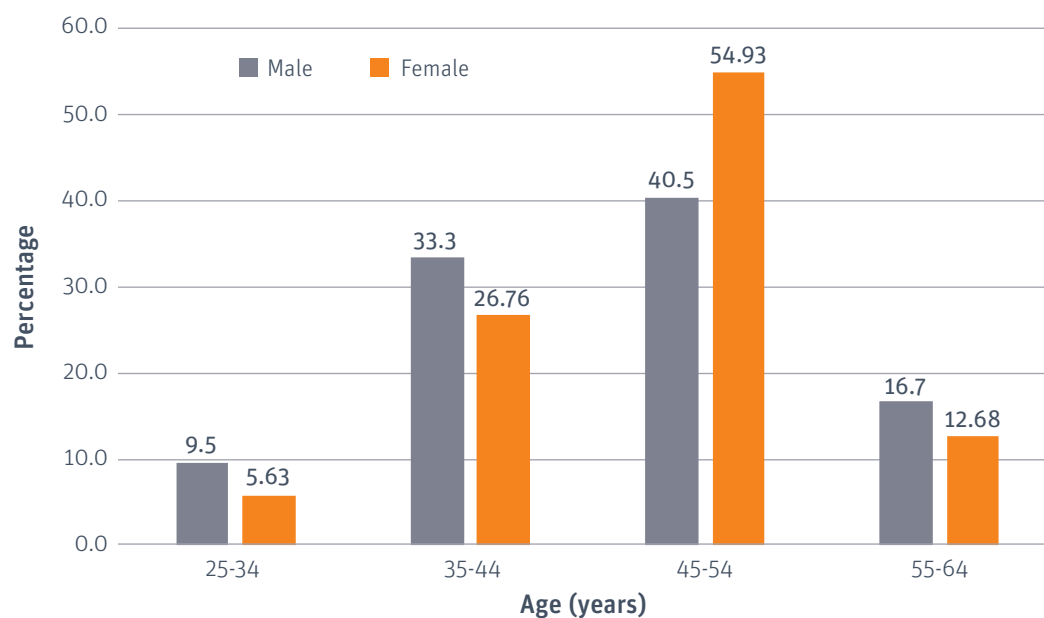
6.2 Professional life

When asked about their *current position*, graduates participating in the study most frequently indicated that they were in executive posts, followed by positions at the technical level. This held true regardless of their profession. Of the 59 physicians in the sample, 26 (44.1%) held executive positions; among other health professionals, 55.6% held executive positions (Table 3).

TABLE 3. Profession and position of the graduates who participated in the Outcome Evaluation of the LIHP at the time of the survey. Washington, D.C., 2015

Profession	Executive level		Technical level		Unspecified		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Other health areas	15	55.6	8	29.6	4	14.8	27	100
Medicine	26	44.1	22	37.3	11	18.6	59	100
Other	13	52.0	11	44.0	1	4.0	25	100
No data	1	50.0	1	50.0	0	0.0	2	100
Total	**55**	**48.7**	**42**	**37.2**	**16**	**14.2**	**113**	**100**[a]

[a] Percentages on this line were rounded; therefore, the total does not equal exactly 100%.

Of the 103 (91.2%) graduates who indicated that they *were employed* at the time of the survey, 45.6% worked at the ministry of health in their respective countries, followed by 18.4% who worked in academic institutions (Table 4).

TABLE 4. Institutions where graduates who participated in the Outcome Evaluation of the LIHP were employed at the time of the survey. Washington, D.C., 2015

Type	Frequency	%
Ministry of health	47	45.6
Education/research	19	18.4
International organization	16	15.5
Other	10	9.7
Other ministry or government agency	10	9.7
Union or professional association	1	1.0
Total	**103**	**100**[a]

[a] Total does not equal exactly 100% due to rounding.

When asked about the *nature of the institution where they were employed,* 79 (76.7%) of the graduates indicated that they worked at public institutions. The category Other included international organizations and NGOs. It is important to point out that five (4.9%) of the institutions that were classified as *autonomous* were public institutions; autonomy was exercised only in the appointment of their officers (Figure 3).

FIGURE 3. Nature of institutions employing the graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015

Autonomous 5%
Other 8%
Private 10%
Unspecified 1%
Public 76%
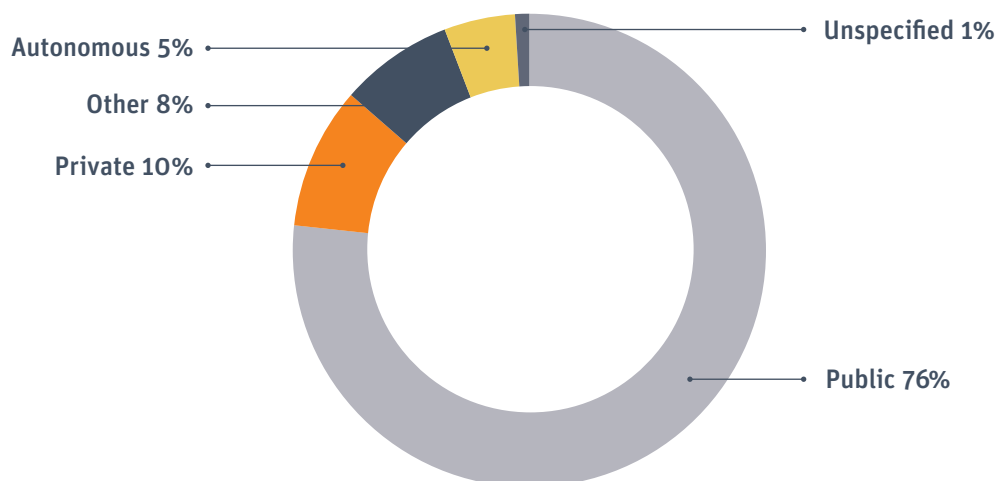
An examination of the relationship between the *type of position and institution* variables found that, of the 38 graduates who worked at ministries of health, 24 (63.2%) held executive positions. Twelve (63.2%) of the graduates who worked in academia held executive positions (Table 5).

TABLE 5. Institution and position held by the graduates who participated in the Outcome Evaluation of the LIHP at the time of the survey. Washington, D.C., 2015

Type of institution	Executive level		Technical level		Total	
	Frequency	%	Frequency	%	Frequency	%
Ministry of health	24	63.2	14	36.8	38	100
Education/research	12	63.2	7	36.8	19	100
International organization	5	31.2	11	68.8	16	100
Other[a]	5	55.6	4	44.4	9	100
Other ministry or government agency	4	57,1	3	42.9	7	100
Union or professional association	1	100	0	0	1	100
Total	**51**	**56.7**	**39**	**43.3**	**90**	**100**

[a] The category Other included the following responses: consultancy group, all levels of the health secretariat, legislative branch, other government entities, industries and businesses.

Employment in the *public health sector* was strong regardless of the type of position held: more than 90% of the graduates worked in this sector during the period studied in either executive or technical positions (Figure 4).

FIGURE 4. Employment in the public health sector by level of position held among graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015
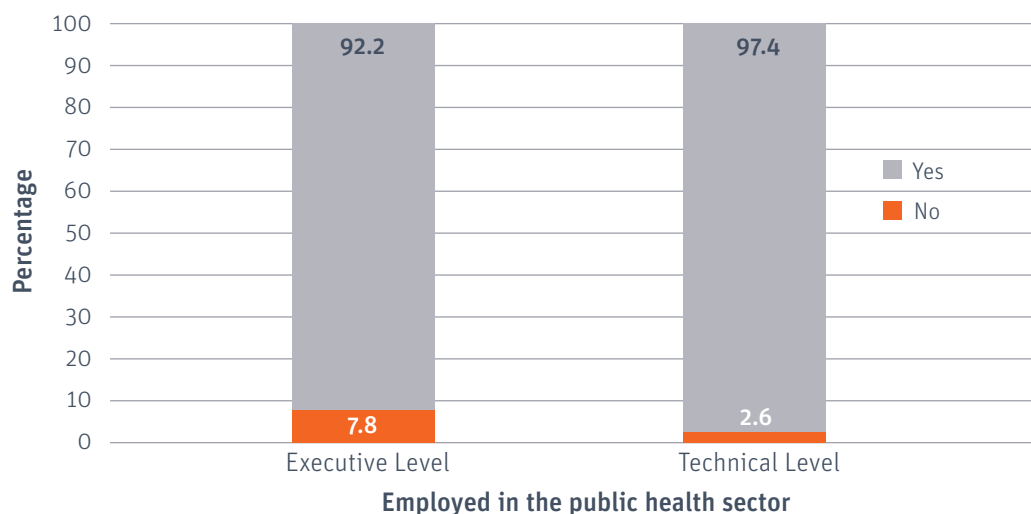
Of the graduates who were employed, 67 (65.0%) were not working in the same position they had held when they participated in the LIHP. When asked whether they believed that having completed the LIHP affected that change in some way, 33 (49.3%) answered *Yes* (Figure 5).

FIGURE 5. Responses of graduates who participated in the Outcome Evaluation of the LIHP to the question: "Do you feel that having completed the LIHP had an influence in that job change?" Washington, D.C., 2015
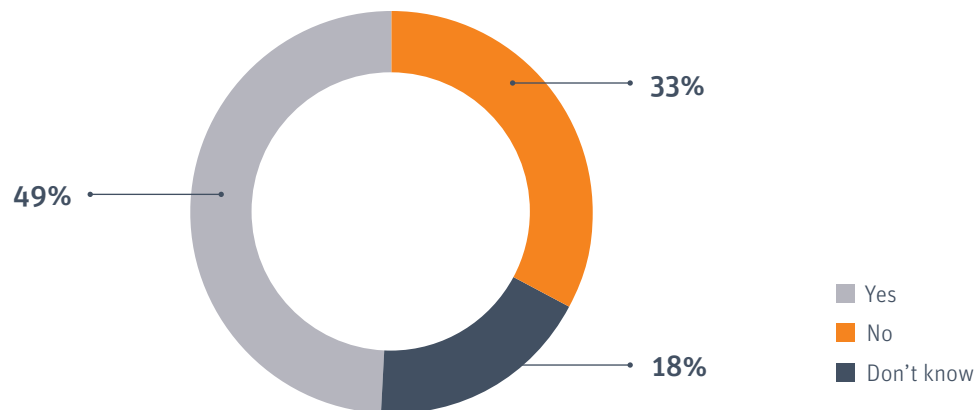
Concerning the degree of satisfaction with improvement of one's professional performance after completing the LIHP, 75 (66.3%) of the graduates felt satisfied with the improvement in their professional performance; 16 (14.2%) had a neutral position; and 21 (18.6%) did not answer this question (Figure 6).

FIGURE 6. Degree of satisfaction with improvement in one's professional performance after having completed the LIHP (on a scale from 1 to 5), according to responses received by graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015
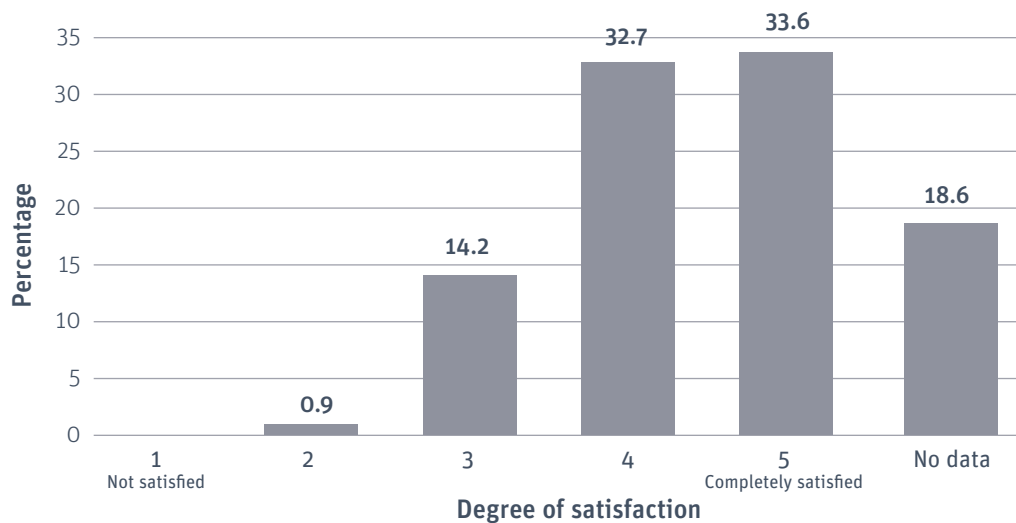
With regard to the factors influencing their *decision to participate in the LIHP*, 46.1% of the graduates said it was a personal decision, while 34.4% reported that they participated based on an institutional decision or at the suggestion of their employer, and 17.2% indicated they had participated at the suggestion of the PAHO/WHO office in their country (Figure 7).

FIGURE 7. Reasons given for entering the program by graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015

Reasons for participating in the LIHP
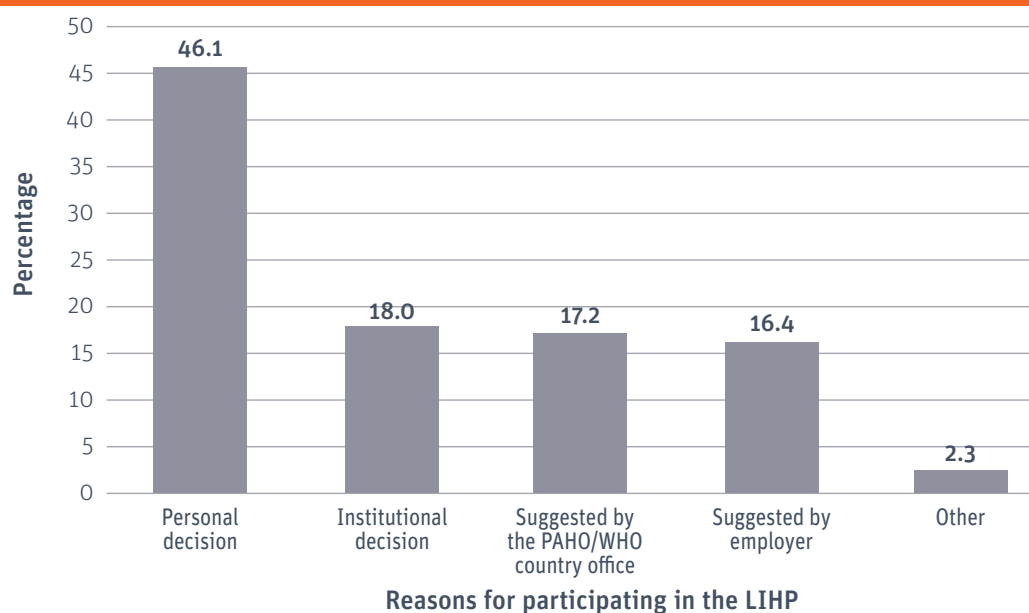
About one-fourth (25.7%) of the graduates in this study *received a scholarship, grant, award or other recognition* based on merit or good performance after their participation in the program. This recognition was related to areas such as research, scientific output, and managerial innovation, among others.

Graduates were also asked about any *formal academic programs undertaken* since completion of the LIHP. Forty-eight (42.7%) graduates pursued studies after program completion. Of these, 15 (31.3%) obtained a doctorate, 12 (22.9%) completed master's degrees, nine (18.8%) completed some kind of specialization, and the rest received another type of degree through other studies.

More than 50% of the graduates reported that the LIHP helped them perform professional activities in project management and development, partnership-building, and coordination. The promotion of international health research and participation in negotiations of international agreements or treaties received the fewest responses by graduates (Figure 8).

A comparison of the results of the questionnaire to those of the group interviews demonstrated consistency in the findings: both methods indicated that graduates felt the LIHP improved their ability to participate in various processes related to international health.

FIGURE 8. Usefulness of the LIHP in developing the ability to participate in various processes related to international health, according to responses by graduates who participated in the Outcome Evaluation of the program when asked "In what ways has the LIHP been useful in your professional life?" Washington, D.C., 2015
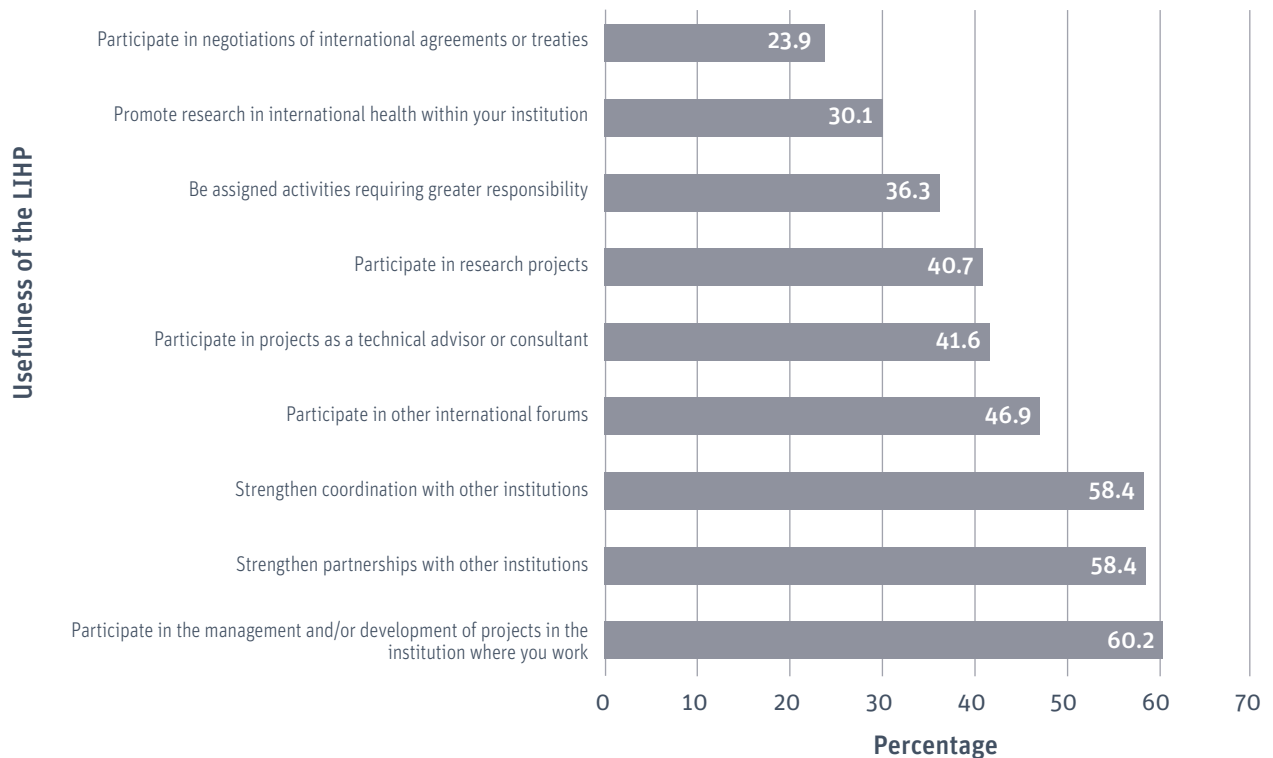
Finally, the *ties between the LIHP and its graduates* are described as a possible indicator of commitment to the learning process upon completion of the program. According to the results, 42.7% of the graduates collaborated with the PAHO/WHO country office in the selection process for subsequent LIHP cohorts, while 39% remained in continuous contact with the program through its alumni network (Figure 9).

FIGURE 9. Ways that LIHP graduates maintain ties to the program, as a possible indicator of commitment to the learning process after program completion, according to responses by graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015

6.3 Knowledge acquired about international health

Responses from the graduates were used to rank the top 10 topics about which the LIHP most contributed to their knowledge. Participants generally indicated that they gained the most knowledge in the area of international cooperation, followed by the social determinants of health and international relations (Table 6).

TABLE 6. Responses of graduates who participated in the Outcome Evaluation of the LIHP to the question "In what areas do you think the LIHP contributed to expand and update your knowledge?" Washington, D.C., 2015

No.	Topics	Frequency	%
1	International cooperation	98	86.7
2	Social determinants of health	81	71.7
3	International relations	79	69.9
4	Leadership in international health	74	65.5
5	Models of development	64	56.6
6	Primary health care	62	54.9
7	Research from an international health perspective	57	50.4
8	Human rights	56	49.6
9	International politics	51	45.1
10	Violence and conflict	51	45.1

Other topics in which less than 40% of participants reported expanded knowledge included access to medicines, climate change, nutrition and food security, stakeholder analysis, trade as a social determinant, project design, chronic diseases, and international economics.

Graduates with a medical background reported that the areas in which the LIHP most helped to expand or update their knowledge were international cooperation and international relations. The topics of human rights and research from an international health perspective were ranked ninth and tenth by this group of graduates in terms of knowledge gained (Table 7).

TABLE 7. Responses of graduates with a medical background regarding the topics in which the LIHP most expanded or updated their knowledge. Washington, D.C., 2015

No.	Topics	Graduates with a medical background (n = 59)	
		Frequency	%
1	International cooperation	48	81.4
2	International relations	44	74.6
3	Social determinants of health	41	69.5
4	Leadership in international health	41	69.5
5	International politics	36	61.0
6	Primary health care	35	59.3
7	Models of development	34	57.6
8	Violence and conflict	30	50.8
9	Human rights	29	49.2
10	Research from an international health perspective	27	45.8

Graduates with backgrounds in other health areas reported that the LIHP most expanded their knowledge in international cooperation, the social determinants of health, leadership in international health, and models of development. Unlike the medical professionals, primary health care (PHC) and research from an international health perspective were among the content areas about which these graduates learned the most (Table 8).

TABLE 8. Responses of graduates with backgrounds in other health areas regarding the topics in which the LIHP most expanded or updated their knowledge. Washington, D.C., 2015

No.	Topics	Graduates working in other health areas (*n* = 27)	
		Frequency	%
1	International cooperation	25	92.6
2	Social determinants of health	23	85.2
3	Leadership in international health	19	70.4
4	Models of development	19	70.4
5	Primary health care	17	63.0
6	International relations	16	59.3
7	Research from an international health perspective	15	55.6
8	Human rights	14	51.9
9	Violence and conflict	12	44.4
10	International politics	10	37.0

Meanwhile, graduates from professions not related to health learned the most about international relations, research, and leadership in international health. Study participants from this group reported a lesser amount of knowledge gained from the LIHP in the areas of PHC, violence and conflict, and international politics (Table 9).

TABLE 9. Responses of graduates from non-health professions regarding the topics in which the LIHP most expanded or updated their knowledge. Washington, D.C., 2015

No.	Topics	Graduates from professions other than health (*n* = 25)	
		Frequency	%
1	International cooperation	23	92.0
2	Social determinants of health	17	68.0
3	International relations	17	68.0
4	Research from an international health perspective	15	60.0
5	Leadership in international health	13	52.0
6	Human rights	13	52.0
7	Models of development	10	40.0
8	Primary health care	9	36.0
9	Violence and conflict	8	32.0
10	International politics	5	20.0

The results of the group interviews indicated expansion of knowledge in the following topics: the social determinants of health, the international legal framework, medicines, epidemiology, international cooperation, and the international health conceptual model. Reference was also made to the application of epidemiological tools to health situation analysis, public health surveillance, and causal research on health problems.

In order to determine the extent to which the knowledge and skills acquired from the LIHP were applied, a one-to-five scale was established in which one signified "not at all" and five signified "very much." Participants were also asked whether they applied such knowledge and skills "in their place of employment" or "outside their place of employment," that is, in other professional settings. The results show that 75.2% of the graduates felt that they applied the knowledge and skills acquired to a "good extent" outside their place of employment, while 73.3% felt they had applied them to a "good extent" in their places of employment (Figure 10).

FIGURE 10.   Application of knowledge and skills acquired through the LIHP within and outside place of employment, according to the responses by graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015

Application of knowledge and skills outside place of employment

Application of knowledge and skills within place of employment

◼ 1-Not at all   ◼ 2   ◼ 3   ◼ 4   ◼ 5-Very Much
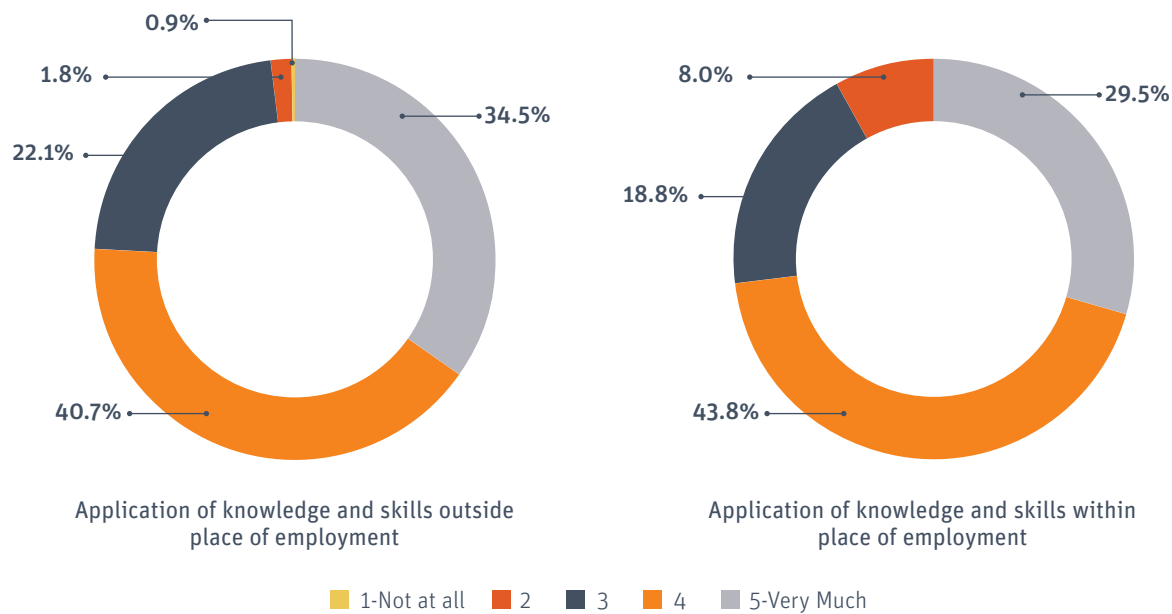
Participants indicated that they were able to apply this knowledge in their professional, academic, and personal lives in various projects at the macro level. This allowed for in-depth problem analysis to address specific factors, enabling participants to determine structural causes, and propose better solutions.

Several of the graduates mentioned that the program helped them put the international health conceptual model into practice at the local and national level:

"A nivel nacional me ha servido para analizar normas, en cuanto al acceso a medicamentos, propiedad intelectual, algunas salvaguardas y, sobre todo, aplicar lo que es el marco conceptual" [*sic*]. [At the national level it helped me to analyze standards regarding access to medicines, intellectual property, some safeguards, and particularly to apply the conceptual framework.]

In terms of epistemological value, the graduates indicated that they used the conceptual model in their jobs and academic settings. Some participants even said that they shared this method with their university students: *"También me ha servido personalmente porque he aplicado en la docencia algunos ejemplos de lo que es Salud Pública Internacional y de cómo se mueve el mundo actual a nivel global."* [It has also helped me personally because I have used some examples of International Public Health and how today's world operates at the global level as a professor.]

Others explained that gaining specific knowledge about international health and its determinants piqued their interest in the topic and led them to pursue master's degrees in areas related to public health.

The knowledge gained was also used to collaborate with other public sectors. One graduate used the knowledge acquired to influence and contribute to the drafting of an agreement and a treaty to help reduce the demand for illegal drugs.

When the graduates were asked about factors limiting their ability to apply the knowledge and skills acquired through the LIHP, they most frequently cited the lack of a network or opportunity for collaboration amongst themselves, which could facilitate more interaction with staff in the PAHO/WHO country offices. Another limitation cited was the lack of support or ties to these offices. Despite this, 42.7% of the interviewees said that they were supporting the PAHO/WHO country offices with some activities, while 39% indicated they had ties to the alumni network (Figure 9).

The political situation in a country can have a negative impact when it results in turnover of health authorities, which, in turn, can jeopardize the continuity of individual or country projects and initiatives. This was cited as an external factor that can sometimes hinder graduates from contributing the knowledge they gained through the LIHP. Finally, participants noted the lack of a shared vision with colleagues who have not undertaken the program in terms of gaps and areas that need strengthening.

6.4 Competencies associated with the program

Below are the results of an assessment of each of the competencies associated with the LIHP curriculum. The competency in communication was addressed as part of the other program competencies.

6.4.1 Situational analysis

Of the graduates who participated in the study, 56 (49.6%) acknowledged having been involved in a project or initiative that began before the LIHP and continued after their participation in the program.

Twenty-four (77.4%) of them reported changing their actions after participating in the LIHP. Among the reasons given was that the LIHP increased their knowledge and broadened their understanding of international health. Only two graduates did not explain the reasons for the changes in their actions.

In the group interviews the graduates explained that prior to the program they viewed public health issues in general terms. Through the program, they gained knowledge about the social determinants of health, models of development, international cooperation, the post-2015 Development Agenda, and the international legal framework. They had the opportunity to analyze specific situations in greater depth, and to apply a more social approach and systematic thinking to the research they conducted in their countries. They also stated that the program gave them a more comprehensive and collaborative perspective of other sectors and disciplines.

6.4.2. Policy design and decision-making

The graduates who took part in the evaluation have been responsible for several types of decisions: 89 (32.4%) were involved in strategic decisions, 63 (22.9%) in managerial decisions and 51 (18.5%) in executive decisions (Figure 11).

FIGURE 11.   Type of decisions graduates have been responsible for that applied the skills acquired in the LIHP, according to responses to the question "Taking into consideration all of your places of employment since having completed the LIHP, please indicate the type of decisions you have been responsible for." Washington, D.C., 2015
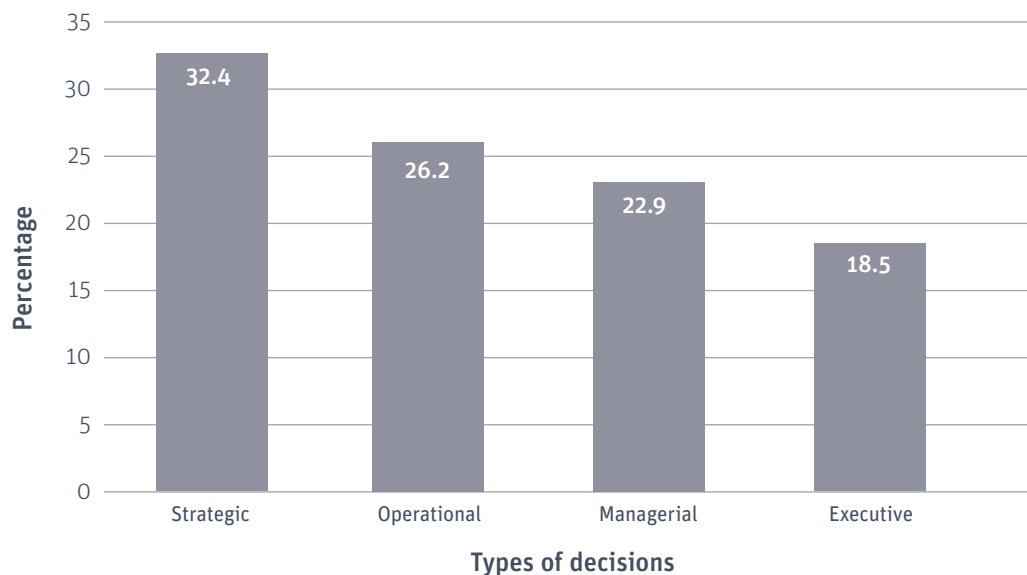
The decisions and actions of the graduates who participated in the evaluation have had an impact on different levels, the most frequent of which was national with 71 responses (37.9%), followed by international with 38 responses (20.0%) (Figure 12).

FIGURE 12. Level of impact of decisions or actions taken according to responses by graduates participating in the Outcome Evaluation of the LIHP to the question, "Taking into consideration all of your places of employment since having completed the LIHP, please indicate the widest level of impact of your actions/decisions taken." Washington, D.C., 2015
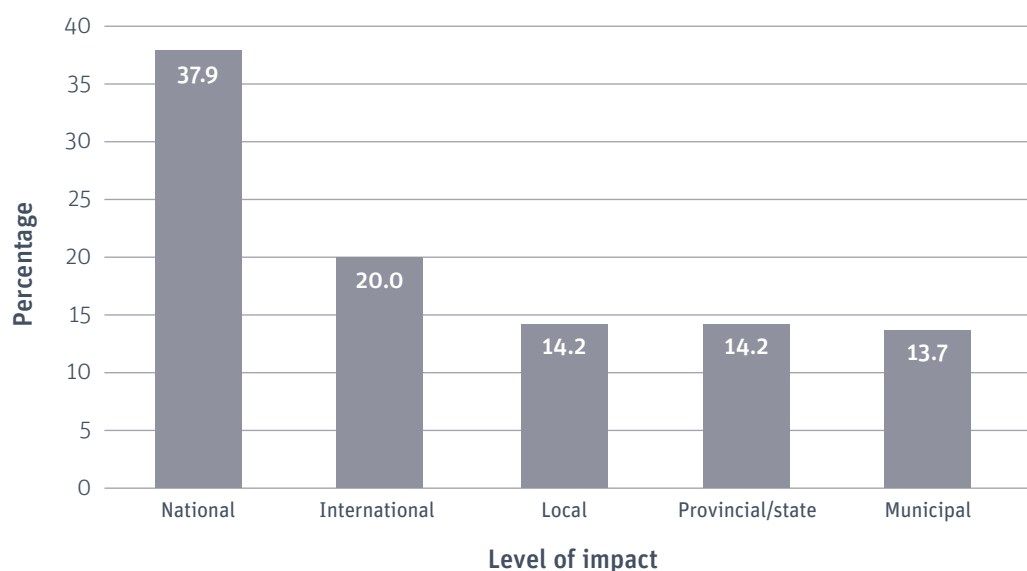
In the group interviews, some graduates confirmed that they participated in national and regional *policy-making* after completion of the program. Nevertheless, the majority of them contributed to specific health programs, such as HIV infection, tobacco and alcohol consumption, and nutrition and food security. Several participants mentioned that being part of national multidisciplinary groups motivated them to seek opportunities at the regional level.

"It was a good opportunity that I had, and with that opportunity it gave me the impetus to move on from that and on to regional [...] It has also built my knowledge base and capacity as it relates to policy negotiations and its development as well as program management."

6.4.3. Project management and cooperation

To evaluate this competency, only the results of the group interviews are presented. The graduates shared examples of the LIHP's influence on their ability to participate in international health-related projects and processes after completing the program, including the following:

● advocacy within the legal system and international agreements to curtail demand for illegal drugs

● joint purchase of medicines through the Southern Common Market (Mercosur) and the Union of South American Nations (UNASUR)

● analysis of PAHO/WHO country contributions and their distribution according to country priorities

● assessment of the cost-effectiveness of medicines and health technologies in the Andean Community

● involvement in regional projects and multilateral forums

One of the graduates had this to say about cooperation processes:

> *"Lo más importante que podría mencionar en el uso de medicamentos y todos los tratados internacionales, de propiedad intelectual; ya se terminó de discutir en octubre los lineamientos del tratado de participación transpacífico el TPT por sus siglas, que abarca países de Latinoamérica como Chile, México y Perú"* [*sic*]. [The most important thing to mention regarding the use of medicines and all the international treaties on intellectual property; in October the talks ended on the guidelines for participation in the Trans-Pacific Partnership, which includes Latin American countries such as Chile, Mexico, and Peru [*sic*].

Another graduate indicated that participation in the LIHP contributed towards strengthening the ministry's skills in bilateral cooperation.

6.4.4. Negotiation and advocacy

An open question was asked to determine whether the graduates felt that they had *contributed to the progress of any agreement or mandate* subsequent to their participation in the program. Of the 113 graduates who took part in the evaluation, 21 (18.9%) responded that they had not contributed to any mandate. The remainder (92 graduates) contributed to several mandates and agreements, including: the Millennium Development Goals, Social Determinants of Health, Regional Declaration on the New Orientations for Primary Health Care, and Strategy for Universal Access to Health and Universal Health Coverage (Table 10).

TABLE 10. Contribution of LIHP graduates to mandates or agreements, according to responses to the question "Have you contributed to progress in any of the following mandates or agreements since your participation in the LIHP?" Washington, D.C., 2015

Mandate or agreement	Frequency [a]	%
Millennium Development Goals	55	49.5
Social Determinants of Health	47	42.3
Regional Declaration on the New Orientations for Primary Health Care	43	38.7
Strategy for Universal Access to Health and Universal Health Coverage	39	35.1
Health Agenda for the Americas 2008-2017	37	33.3
Other mandates or international agreements (global, regional or subregional)	36	32.4

[a] A graduate may have participated in more than one mandate or agreement.

The 92 graduates who felt they had contributed to the progress of mandates or agreements after completing the LIHP believed that the program provided them with more information and useful tools on the topic, and facilitated relationships with other actors working in international health. Only one graduate felt that the LIHP had not helped him or her contribute to that progress.

With regard to *legal frameworks*, during the group interviews the graduates indicated that they had the opportunity to participate in the drafting of guidelines, regulations, laws, and agreements on matters related to alcohol, tobacco, and malnutrition, among others.

> *"I've also subsequently worked looking at alcohol legislations and regulations. I've done a review of the alcohol laws and regulations in the region. I'm working with the Healthy Caribbean Coalition."*

Participants were also asked whether they had represented their country at any activity or event after completing the LIHP. Of the 113 interviewees, 51 (45.1%) had not. Of those who had reported representing their country, the greatest proportion (40.7%) participated in meetings of regional or subregional integration bodies, while a lesser percentage (16.8%) were involved with multilateral negotiations (Table 11).

TABLE 11.	Responses of graduates who participated in the Outcome Evaluation of the LIHP to the question, "Have you represented your country in any of the following activities or events since your participation in the LIHP?" Washington, D.C., 2015

Activities or events in which graduates represented their countries since the LIHP	No.	%
Meetings of regional or sub-regional integration bodies	46	40.7
Bilateral negotiations	28	24.8
International or regional summits	27	23.9
International forums or assemblies that necessitate decision or consensus among countries and/or participating actors	27	23.9
Multilateral negotiations	19	16.8

In total, 103 of the graduates had represented their country in negotiations; of these, 30 (29.1%) felt that the LIHP made them more competent negotiators, followed by 27 respondents (26.2%) who said they learned more about the topics that were the object of the negotiations or agreements.

In the group interviews, the interviewees said that the LIHP had enabled them to participate in:

- international treaties in Latin America
- multilateral forums on agreements in South America
- coordinated actions to regulate public health at the national level

- treaties in UNASUR and Mercosur
- regulation of medicines at the national level
- work at regional level with the Healthy Caribbean Coalition

Participants spoke of their experiences in helping draft sub-regional and regional treaties:

> *"… el curso me sirvió para desarrollarme en todo lo que es el campo de Unasur, tratados con Mercosur, con la Comunidad Andina en cuanto a medicamentos y en cuanto a todo lo que se ha defendido a nivel de la Organización Mundial de la Salud, principalmente el acceso a medicamentos en Unasur"* [*sic*]. [… the course helped me learn all about UNASUR, Mercosur treaties, and the Andean Community with regard to medicines and all that has been defended at the World Health Organization, particularly regarding access to medicines in UNASUR.]

They also stressed the importance of learning to negotiate and having a positive influence in different public health arenas and on their corresponding protocols, regulations, and guidelines or standards for different levels of care. The participants' narratives made it clear that strengthening their negotiating skills and broadening their knowledge of the international legal framework were very important to them.

> *"El ejemplo más relevante que me viene a mi mente es en el 2011, cuando trabajé en la oficina de la Presidencia, que enfrentamos un problemas muy grave de narcotráfico en [país] y en un principio se quiso abordar, bueno, en casi toda la administración se abordó de una manera de combate de represión a la oferta de la droga y el PLSI me ayudó a ser parte de un grupo de personas que abogamos más bien por un tratamiento preventivo de la demanda. Esto nos llevó a tratar de trabajar en el marco de diferentes acuerdos internacionales, en el marco de diferentes proyectos que ya existían con la Organización de Estados Americanos, principalmente pero también con otros organismos internacionales, y ver de qué manera podríamos plantear una solución desde el ámbito también desde los determinantes sociales"* [*sic*]. [The most relevant example that comes to mind is from 2011 when I worked in the office of the Presidency and [our country] was facing very serious drug trafficking problems. At first almost all of the administration advocated an approach based on controlling supply; the LIHP helped me to be part of a group advocating instead for an approach based on treatment to reduce demand. This led us to try to work within the framework of different international agreements and different projects that already existed, especially with the Organization of American States, but also with other international organizations, to see how we might propose a solution that also addressed the social determinants of health.]

More than 40% of the graduates participated in advocacy activities, or national or local council events after completing the LIHP. Among these, 51 (45.1%) attended advocacy events on health or development (Figure 13).

FIGURE 13. Percentage of graduates that participated in advocacy activities after completing the LIHP, grouped according to topic; figure is based on survey responses. Washington, D.C., 2015
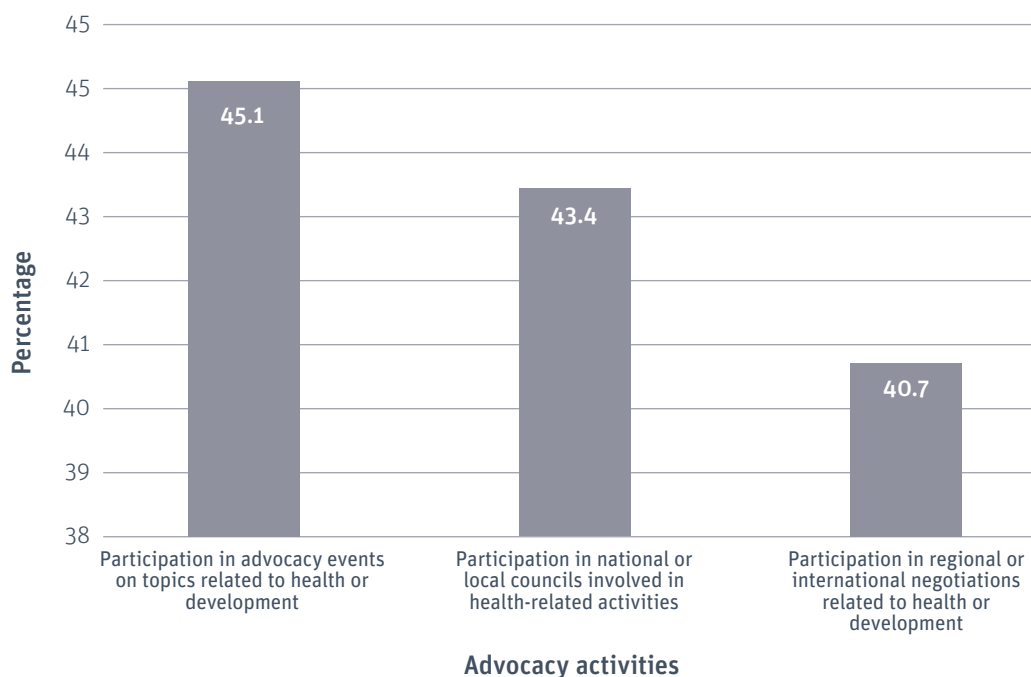
When asked about leadership or development of advocacy activities, 43 (38.1%) of the graduates had organized an advocacy event related to health or development since the LIHP, 40 (35.4%) had disseminated advocacy information, and 21 (18.6%) had circulated petitions on issues related to health or development.

6.4.5 Generation and exchange of knowledge

Among graduates, 59 (52.2%) had been involved in teaching about international health, while 54 (47.8%) had organized various educational activities (conferences, meetings, workshops, forums, seminars or other events on international health).

Furthermore, 75 (66.4%) of the graduates attended conferences or other events related to international health, while 64 (56.6%) had presented papers at those events.

Conducting research and publishing articles about international health were the main knowledge generation and dissemination activities that the graduates of the LIHP carried out (Figure 14).

FIGURE 14. Main knowledge generation and dissemination activities carried out by LIHP graduates after completion of the program, according to responses by graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015

Knowledge generation and dissemination
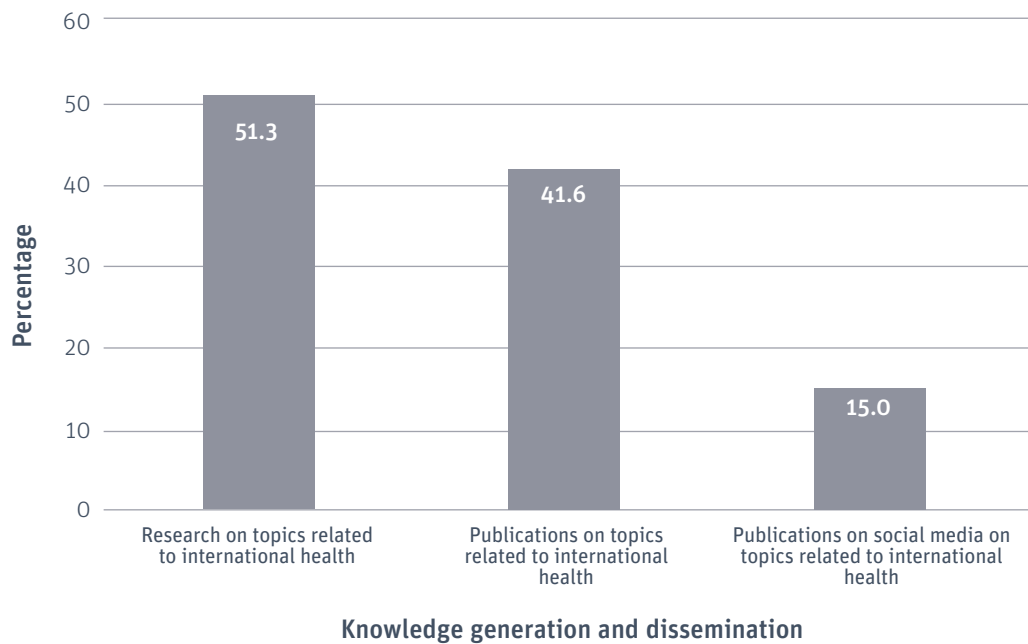
The group interviews show that the LIHP strengthened competencies in communication and knowledge management. Some graduates said that after completing the LIHP they published scientific articles in various renowned journals:

> *"Having done the program, I have since published two pieces from my country project. In addition to that, my country project which was on [topic], aspects of my work have been used to help in formulating [type of] regulation in [country]. The [national] Coalition has actually used my work in their campaign to educate persons regarding [issue] and its impacts on the environment. Subsequent to all of this happenings [sic], the media has engaged me quite a bit in speaking to the issues at hand. Even from that country project I have managed to do additional research..."*
>
> *"I have two international publications in high-impact journals from the country project."*

6.5 Recommendations of LIHP graduates

Finally, graduates were asked to make recommendations to improve the relevance and quality of the program. Their responses can be grouped into three categories: 1) call for applications and candidate selection, 2) development of the program, and 3) post-program activities.

6.5.1 Call for applications and candidate selection

This category grouped together those recommendations related to program promotion and candidate selection. The graduates offered the following suggestions: increase the visibility of the LIHP in countries; increase participation of the English-speaking Caribbean and North America; and maintain the intersectoral nature of the country teams.

6.5.2 Development of the program

Participants suggested the following to sustain the development of the program: retain the multidisciplinary nature of the program with highly qualified academic professors, and ensure continuous monitoring throughout the learning process. To this end, the graduates recommended maintaining institutional agreements, strengthening the relationship with the PAHO/WHO country office in each country, adapting the curriculum, and establishing ties with other strategic partners in the Region (Table 12).

TABLE 12.	Suggestions of the graduates who participated in the Outcome Evaluation of the LIHP. Washington, D.C., 2015
Categories	**Suggestions made**
Possible adaptations to the curriculum	• Delve further into the conceptual bases and introduce new topics consonant with the issues on the global agenda • Provide thematic continuity between learning modules and devise learning activities that facilitate application and incorporation of concepts • Consider inclusion of topics related to human resources and health diplomacy • Organize discussion groups to define an international health project that is applicable to different regions and addresses a health issue requiring immediate attention • Increase the duration and number of face-to-face sessions • Extend the duration of the program • Continuously review program content to ensure it remains relevant and current
Institutional agreements	• Ensure that the participants' home institutions truly support their participation in the program • Ensure that the participants' home institutions take advantage of the training they receive • Follow-up with institutions regarding learning progress • Involve institutions more closely in program activities

Categories	Suggestions made
Relationship with the PAHO/WHO office in each country	• Establish a closer relationship with relevant national institutions and country activities • Consider a possible internship with the PAHO/WHO country office
Links with other partners	• Collaborate with research centers and universities on curriculum development • Invite experts from the Region to share their perspectives on issues of global relevance

6.5.3 Post-program activities

Participants described actions that could be taken to maximize the program's impact after completion of the same. They suggested the following:

● Strengthen the alumni network, considering the use of academic centers as a possible platform.
● Establish strategies to ensure that graduates remain linked to LIHP activities, attend special events, or work within the program itself (as tutors or mentors).
● Encourage graduates to develop national, subregional, and regional international health training opportunities.
● Conduct joint projects and research.
● Promote the creation and dissemination of publications.
● Distribute newsletters.
● Provide continuity to some of the projects developed during the LIHP.
● Encourage ministries or institutions to support graduates in continuing their engagement with international health.
● Create a post-LIHP internship in an international institution.

The graduates reiterated the limitation of continuing to network regionally with their LIHP colleagues.

> *"A mí me parece que es el principal valor agregado de ser una comunidad latinoamericana de profesionales, creo la mayoría sobresalientes tanto en sus experiencias profesionales como en su formación académica; saquemos provecho de ello y eso lo podemos hacer en diferentes ejes entre nosotros y quienes cursan actualmente el programa entre nosotros y… la factibilidad es que actualmente está desarrollando la OPS"* [*sic*]. [*To me that seems to be the main added value of a Latin American community of professionals—most of whom are outstanding in both their professional experience and their academic training. Let's take advantage of this; we can do it in different ways between us and current program participants, and amongst ourselves … it is feasible because PAHO is currently doing it* [*sic*].

7 DISCUSSION

The evaluation results are representative of the program participants in terms of age and gender, since the program does not have an age limit and PAHO/WHO follows a policy of gender equity. More women are represented in the study and in the LIHP, which reflects their increased presence in higher education and the health-related professions *(17, 18).*

These results are also representative of the LIHP participants in terms of their institutional ties, as the ministries of health have the largest number of candidates every year. In addition, the institutions that have shown the most interest in training and strengthening competencies in international health are from academia, including university schools of health, as well as from PAHO, other international agencies, NGOs, and other ministries or government agencies associated with the health sector.

The results of the evaluation indicate that the LIHP has impacted the professional lives of graduates. It has been a key determinant or factor in their promotions, improved inter- and intra-institutional coordination, encouraged research or intervention projects, and helped them strengthen partnerships. The study shows that the majority of graduates have influenced the public health sector, which indicates a high degree of consistency between their field of work and the LIHP, since the professional profile of the program is aimed at meeting public health demands in the Region.

The graduates generally show an interest in keeping themselves up to date and pursuing further academic degrees in order to strengthen their professional competencies, thereby enabling them to respond appropriately and with quality to the global demands posed by public health and international health. This may be related to the responses graduates gave about studies undertaken after completion of the program.

As regards the knowledge acquired in the field of international health, the LIHP curriculum is aligned with international and global workforce demands. Most of the graduates have been able to apply both the

knowledge and skills which they said that they gained, updated, or developed through the program. The most useful knowledge gained from the LIHP was that which enabled them to explain the causality of health problems, the conflicts that could arise over certain issues, and the alliances and negotiations that are needed to make international agreements viable.

The graduates indicated satisfaction with the program because it allowed them to update their knowledge and strengthen and develop competencies in the field of international health. Furthermore, it enabled them to obtain promotions and pursue further studies, and offered them other opportunities to improve and move ahead professionally.

The results show that the competencies related to situational analysis and policy design and decision-making strengthened the leadership of the graduates. They said that their actions and decisions have been more relevant and comprehensive and at a higher level of responsibility. They influenced executive levels, and had local and national impact.

After completing the program, the graduates helped advance several mandates or agreements on matters of regional and global interest, such as: the Millennium Development Goals, Social Determinants of Health, Regional Declaration on the New Orientations for Primary Health Care, Strategy for Universal Access to Health and Universal Health Coverage, and the Health Agenda for the Americas 2008-2017. They have been involved in strategic activities in various environments. Furthermore, they have collaborated with the development of activities or events, including attendance at meetings of regional integration bodies, bilateral and multilateral negotiations, international or regional summits, and international forums or assemblies, among others.

In this regard, it can be said that the LIHP strengthens and promotes the negotiation and advocacy skills and competencies of the leaders who take part in this program, most of whom have the power to influence activities in different areas, given their executive positions. This validates the selection criteria and work of the program to strengthen leadership and establish a critical mass in the Region to address international health issues and priorities.

The graduates are applying the competencies developed or strengthened through the LIHP through their professional positions. This indicates that there was effective learning and that the LIHP curriculum is relevant to the demands of international health.

With regard to the generation and exchange of knowledge, in addition to attending training events as participants or facilitators, the graduates have also contributed to the generation of knowledge through their involvement in research and the publication of scientific articles in the fields of public health and international health. Furthermore, they have helped disseminate information about development and health, created international health refresher courses, or introduced international health into already established university degree programs related to health, among other things. One example is the special issue of the *Pan American Journal of Public Health* devoted to international health which included five articles based on

projects conducted by LIHP graduates from the 2008-2012 cohorts. Another example is the *Cuban Journal of Public Health*, which published two volumes (in 2010 and 2011) encompassing 93% of the papers written by Cuban participants in the course.

Application of the aforementioned competencies shows that the LIHP curriculum is relevant and useful in the real world. Several authors have pointed to the need for training in international health among professionals working in the health sector *(19, 20)*. A study conducted by PAHO in 2007 demonstrated the dearth of opportunities for training in international health and related subjects in the Region of the Americas, as most training programs in this area are based in higher income countries *(21)*. This deficit was highlighted by PAHO/WHO member countries when they adopted Resolution CD48.R16 in 2008, which urged PAHO to "collaborate with governments and academia in the development of specific training programs in international health," and to "continue and expand the Leaders' Training Program in International Health and promote synergies and complementarity with the initiatives that the countries may develop to train specialists in the fields of health and international relations" *(22)*.

The LIHP academic network has endeavored to create new training opportunities in international health. Nevertheless, the number of training programs in international health and global health in the Region continues to be relatively low *(23)* and with varied approaches, depending on the perspective and vision of their creators.

Among the guiding principles of the VCPH is that of quality assurance. It should be emphasized that there are different views on what constitutes quality and how it should be measured. The main focus of the VCPH to date has been on the usefulness, relevance, and satisfaction of users with the learning resources and activities in the courses, as well as the main advantages, facilities, and opportunities participants glean from them *(24)*. All of this points toward measuring the quality of the learning process.

The academic quality of the LIHP has become apparent through the evaluations of the modules and of the program as a whole, which have emphasized the excellence of the tutors and mentors, as well as the learning processes and resources. These findings are consistent with an analysis conducted by the VCPH in 2015 on user satisfaction and the quality of the virtual courses offered by the Campus. The study examined almost 32,000 surveys completed by users from different courses, and focused on questions related to the usefulness of and satisfaction with the different learning resources and activities. In all categories reviewed, 90% or more of the users responded positively *(24)*.

Taking into consideration the program's international context, the graduates made several recommendations, including ensuring relationships between the participants' institutions, the PAHO/WHO country offices, and PAHO Headquarters in order to counteract political changes at institutions which might compromise their commitment to the program. It is hoped that fluid channels of communication with national counterparts are created and maintained. The graduates also proposed that new ties be established with research centers and experts, in accordance with the different topics addressed in the program. Regarding

content, they suggested ensuring continuity between modules, and that the topics remain timely and are covered in sufficient depth. As regards methodology, the recommendation was to explore the possibility of increasing the number of face-to-face activities as well as the duration of the program.

In conclusion, one priority of the LIHP is to maintain the alumni network, which can help this PAHO-trained critical mass in the Region achieve international, regional, national, and local stature.

8 LIMITATIONS

The reference population used in the study was graduates who had successfully completed the LIHP, which represents 89.4% of those who started the program. Data was not collected on participants who did not complete the LIHP or on other professionals that were not selected for the program, for comparison with the reference population.

The limited resources available for the study hindered the ability of the researchers to follow-up with potential study participants. This, in turn, impacted the number of study participants available to extract the subsample for qualitative analysis.

Finally, since the group interviews were conducted virtually, it was not possible to capture gestures and body language of nonverbal communication. Furthermore, connection and audio problems arose, which made it difficult to understand some of the interviewees' responses.

9 CONCLUSIONS

- The LIHP has inspired participants to continue their academic training, engage in nontraditional areas of public health, and strengthen the policy-making capacity of the countries of the Region. With regard to job opportunities, participation in the program has opened doors for graduates to work outside their country of origin, receive promotions, and connect with other professionals working in public health, among other things.

- The findings of the evaluation confirmed that graduates are able to apply what they learned from the program, which has implications for their professional lives. Furthermore, the study provided them the opportunity to make recommendations to improve the relevance and quality of the program in light of their experiences.

- The LIHP has helped improve the competencies of the leaders of the Region and given them tools to plan and implement actions in the fields of public health and international health.

- The recommendations made by the graduates point to a need to maintain the quality of the training program and to innovate to respond to global demands and issues. The graduates also indicated an urgent need to institutionalize the alumni network as a community of practice or trained critical mass to engage in advocacy in matters of international importance. Regarding the latter, the graduates reaffirmed their commitment to contribute to the integration of and participation in academic and research networks to facilitate knowledge generation.

10 RECOMMENDATIONS

- Move forward with the development of other LIHP evaluation proposals in order to establish associations and determine the impact of the program. It is recommended that a comparison be made between those who passed and those who did not pass the program to better measure the added value of the program. It is also proposed that an evaluation be conducted using multiple sources of evidence and a convergence of data, as suggested by some authors *(6)*.

- Maintain the quality of the training program and introduce new topics, activities, and learning materials in order to ensure that the program remains relevant in light of changing global and regional contexts and problems.

- Encourage PAHO/WHO to launch a funded project to enable the rapid organization and establishment of the LIHP alumni network, including a mechanism to integrate, strengthen, and link it to the current program, and to promote joint research projects, spur continuous training, disseminate publications, and follow-up on some of the LIHP projects.

- Establish cooperation agreements through PAHO/WHO with universities in countries of the Region so as to strengthen the LIHP academic network and thus the quality and relevance of the training-learning processes.

11 REFERENCES

1. Pan American Health Organization. Edmundo Granda Ugalde Leaders in International Health Program. Washington, DC: 2015. Available from: http://www.paho.org/hq/index.php?option=com_content&view=article&id=10208%3Acall-applications-2014-edmundo-granda-ugalde-leaders-international-health-program&catid=1939%3Aleaders-international-health-program-&Itemid=2099&lang=es Cited 2014 Dec 1.

2. Auer A, Guerrero Espinel JE. The Pan American Health Organization and international health: a history of training, conceptualization, and collective development Pan American Journal of Public Health. 2011;30(2):122-132.

3. Potter C, Brough R. Systemic capacity building: a hierarchy of needs. Health Policy Plan. 2014;19(5):336-45.

4. Parsons J, Gokey C, Thornton M. Indicators of inputs, activities, outputs, outcomes, and impacts in security and justice programming. Washington, DC: Vera Institute of Justice; 2013.

5. de Koning J, Korolkova K, Maasland E, van Nes P. Evaluation of the ESF support to capacity building: final report. Texas: Rosenberg Publishers; 2006.

6. Rovai, AP. A practical framework for evaluating online distance education programs. Internet High Educ. 2003;6:109-24.

7. Sarramona J. Evaluación de programas de educación a distancia. Rev Iberoam Educ Distancia. 2001;4(1):9-33.

8. Pan American Health Organization. About the Pan American Health Organization (PAHO). Who we are. Washington, DC: PAHO; 2016. Available from: http://www.paho.org/hq/index.php?option=com_content&view=article&id=91&Itemid=220&lang=en#mision Cited 2016 Oct 18.

9. Pan American Health Organization, Department of Health Systems and Services. Priorities and strategies of technical cooperation. Human Resources for Health. Washington, DC: PAHO; 2016. Available from: http://www.paho.org/hq/index.php?option=com_content&view=category&layout=blog&id=526&Itemid=2054&lang=en Cited 2016 October 18.

10. Pan American Health Organization. What is the Campus? Washington, DC: PAHO; 2016. Available from: https://www.campusvirtualsp.org/en/what-campus Cited 2016 Oct 18.

11. Pan American Health Organization. Virtual Public Health Campus. Educational Approach. Conceptual Aspects. Washington, DC: PAHO; 2013. Available from: https://www.campusvirtualsp.org/sites/default/files/download/modelos/vcph_educational_approach.pdf Cited 2016 Oct 18.

12. Magaña-Valladares L, Nigenda-López G, Sosa-Delgado N, Ruiz-Larios JA. Public health workforce in Latin America and the Caribbean: assessment of education and labor in 17 countries. Salud Pública Méx. 2009;51(1):62-75.

13. Petrakova A, Sadana R. Problems and progress in public health education. Bull World Health Organ. 2007;85(12):901-80.

14. Cardoso Espinoza EO, Cerecedo Mercado MT, Ramos Mendoza JR. Propuesta para evaluar la calidad de un programa de posgrado en educación. Rev Iberoam Educ. 2011;55(2):1-12.

15. Cardoso Espinoza EO, Cerecedo Mercado MT. Propuesta de indicadores para evaluar la calidad de un programa de posgrado en educación. Rev Electrónica Invest Educ. 2011;13(2):62-82.

16. Tünnerman Berhein C. Nuevas perspectivas de la pertinencia y calidad de la educación superior. Bol IESALC Informa. 2010;207. Available from: http://www.iesalc.unesco.org.ve/index.php?option=com_content&view=article&id=2029%3Anuevas-perspectivas-de-la-pertinencia-y-calidad-de-la-educacion-superior&catid=126%3Anoticias-pagina-nueva&Itemid=712&lang=es Cited 2017 Feb 15.

17. United Nations. Report of the High-Level Commission on Health Employment and Economic Growth Working for Health and Growth: investing in the health workforce. New York: UN; 2016.

18. Organization for Economic Co-operation and Development. Health at a Glance 2015: OECD Indicators. [website]. Available from: http://dx.doi.org/10.1787/health_glance-2015-en Cited 2017 Feb 15.

19. Kickbusch I, Silberschmidt G, Buss P. Global health diplomacy: the need for new perspectives, strategic approaches and skills in global health. Bull World Health Organ. 2007;85(3):230-2.

20. Kickbusch I, Novotny T, Drager N, Silberschmidt G, Alcazar S. Global health diplomacy: training across disciplines. Bull World Health Organ. 2007;85(12):243-4.

21. Pan American Health Organization. Human Resources for Health Unit. International and global health training opportunities. Washington, DC: PAHO; 2007.

22. Pan American Health Organization. Cooperation for Health Development in the Americas. 52nd Directing Council, Washington, DC: PAHO; 2013. (Policy document and resolution). Available from: http://www1.paho.org/english/gov/cd/cd48.r16-e.pdf Cited 2017 Feb 15.

23. Consortium of Universities for Global Health. Academic Global Health Programs. [website]. Available from: https://www.cugh.org/programs Cited 2016 Nov 3.

24. Listovsky G. Virtual Campus in Public Health, Seminar/Workshop: Desafíos y Oportunidades en el Marco de la Estrategia para el Acceso Universal a la Salud y la Cobertura Universal de Salud. Panama City, 2015 Nov 17-18.

http://www.paho.org/leaders-international-health

https://www.facebook.com/PAHOWHO

https://twitter.com/pahowho

https://www.instagram.com/opspaho/

https://www.youtube.com/user/pahopin

https://www.flickr.com/photos/87642443@N05/

PAHO/WHO

Pan American
Health
Organization

World Health
Organization
REGIONAL OFFICE FOR THE Americas