

editorial

The development of mechanisms that facilitate the production and dissemination of information among members of RETS, encouraging the sharing of knowledge and studies, is one of the major strategies for strengthening the area of training for health technicians.

Since its creation, one of the goals of RETS is to contribute to the consolidation of its member institutions through the promotion of link between them and the subsequent expansion of the exchange of experiences in the areas of teaching, research and technical cooperation. In this sense, the RETS website, which will soon be inaugurated, and the publication of this magazine have a fundamental role.

With the aim of increasingly enhancing these products, empowering its usages, we introduce, as of this edition of the magazine, some novelties. The first is the propagation, wherever possible, of "Read More", with the relationship of the sources used for the writing of the materials, so that our readers can further deepen their knowledge of the subjects considered. The second, still in its infancy, is the collaborative work with communications professionals from partner institutions, be it in the transmission of news, the suggestion of guidelines that reflect needs and interests related to the education of technicians, or the support of journalistic investigation in the target locations.

Finally, it is worthy of note that in this second issue of RETS we strive to include older experiences, such as those from the Polytechnic Schools of Health in Cuba, or more current ones, such as the courses in health technologies implemented in Costa Rica, Uruguay and Portugal, by

considering that these trajectories may be useful to efforts developed by other countries. Also worthy of note is the interview with the director of the Pan American Health Organization (PAHO), Mirta Roses Periago, in which she addresses important issues related to the training and work of health technicians in the Americas and other regions.

We hope that this initiative will bring RETS members even closer together, encouraging a more active participation in the development of future editions of the magazine, even in the form of critiques and suggestions which may enrich our efforts.

Happy reading!

RETS Executive Secretariat

acknowledgements

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“There will be no changes in health care programs without adequate human resources who are well prepared and motivated”

In 2002, at 56 years of age, the Argentine Mirta Roses Periago was elected Director of the Pan American Health Organization (PAHO/WHO), a position she assumed in February of the following year. A medical surgeon with a diploma in Public Health and expertise in epidemiology and tropical medicine, she is the first woman to lead the PAHO, which is comprised of 46 countries and is, with its 106 years in existence, the oldest international health organization in the world. In an interview with RETS Magazine, she discusses the key issues facing health technicians in the Americas and highlights the importance of cooperation among countries and institutions for the solution of these problems.

Almost three years after the Toronto Meeting and the call for “a Decade of Human Resources in Health,” what is the level of commitment of Latin American and Caribbean governments with respect to the issues?

Since the call to action in October of 2005, the countries of the Americas have recognized that there will be no changes in health programs without adequate human resources who are well prepared and motivated. For that to happen, new methodologies must be developed and efforts must be maintained, for the very concept of a Decade of Human Resources for Health recognizes that this is a long-term process. In this sense, countries pledged to achieve 20 regional goals by 2015, which will allow for the evaluation and organization of these efforts.

What new mechanisms and initiatives for the formulation of effective national policies and plans for training and utilization of human resources, especially in the health technician sector, are being, or are scheduled to be, adopted by PAHO member countries which have greater deficiencies in the area?

The main aspect is to link training programs and management of human resources for health to the growth of the Primary Health Care (PHC) strategy. Programs are gradually being created by means of tools such as the Virtual Campus of Public Health, to expand access to modern management techniques and continuing education for the staff and leaders who are implementing PHC programs. This also involves an increasing linking among all of the development efforts of primary care networks so that the infrastructure, information and supply systems, and human resources can be developed in harmony with national targets for universalization of access to health services. This is a great challenge for universities and leaders trained in traditional management concepts.

What is PAHO’s policy with regard to Health Technicians?

There are two very important milestones in the tradition that PAHO has in the technical cooperation for the development of these professionals. The first is the experience of the 1990’s, when, under the Costa Rican coordination, a number of different countries, which increased with time,

created the Network of Technical Education in Health (NTEH/RETS) with bases in each country which were responsible for specific projects of interest to the entire network. This experience weakened over time but was reactivated in 2005 with the transfer of Executive Secretary of the Network to the Joaquim Venâncio Polytechnic School of Health (EPSJV/Fiocruz), which was designated Collaborative Center of the PAHO/WHO in health technician education in 2004 and has been working intensively on the development of studies in health human resources, the dissemination of information, knowledge production, and horizontal cooperation with countries like Bolivia and Paraguay to strengthen education. With EPSJV we are promoting cooperation for the development of said health personnel, in addition to other initiatives.

The second is the program that has been in development for over a decade, with support from PAHO, in 15 Latin Americas countries where, in the nursing field, there is a high number of auxiliary personnel and a low percentage senior-level professionals. This finishing program qualifies auxiliary personnel at their place of employment and during their normal shifts, through innovative teaching methods which integrate the processes of work-study and service-training, and allows for direct and immediate improvement of health care quality.

One of the challenges proposed in the Toronto Meeting of 2005 was the need for development of interaction mechanisms between training and service institutions that enable the training of professionals under a care model focused on universality, equity and quality which serve the needs of the health of the population. Taking into consideration that many health programs in Latin America and the Caribbean are not universal, how must changes occur in the training of health workers?

The key elements to achieving the necessary interaction and having sufficient human resources in health with appropriate training are: the promotion of joint action of the Ministries of Health and Education for the increase in competencies in professional education; the adoption of policies that promote the attraction of students in alignment with the APS strategy, encouraging stability in strategic places of well-trained professionals and ensuring financial resources necessary for the sustainability of human resources in the APS; the creation and use of mechanisms to maintain the levels of knowledge required by the APS; and last, the establishment of agreements with and monitoring by the Ministries of Health of APS training processes.

How might the above-mentioned proposals influence the commitment to renovate the APS with respect to training of health technicians?

The renovation of the APS was declared a priority by the Assembly of the World Health Organization and previously by PAHO. This requires a political commitment that is beginning to have an impact on their own national decisions about adoption of the proposed development of health programs based on the APS. The transformation of jobs, the replacement of people in community centers and the guidelines for teaching, among other things, have had an influence on the competencies, responsibilities and education of technicians and promoted their integration into the health care teams. It is important to emphasize that the number of health technicians linked predominantly to medical technologies needs to adapt their profile to the demands for quality, proximity to populations and health priorities, which involves integrating concepts of public health, epidemiology and health ethics. On the other hand, the technicians in public health, community health and basic health services must intensify their integration into the health teams, strengthen their population vision and

strategy and learn to contribute to the creation of APS service networks.

In many countries of the Region, the shortage of health workers is an obstacle to achieving the Millennium Development Goals (MDG/ODM). What kind of relationship can be established between the increase in the amount of such workers, with their increased qualification, and improvement in health conditions? Are there data to support such relationship?

Many studies, conducted under the Family Health Program (FHP/PSF) in Brazil and in various other countries show that the expansion of APS systems with organized skilled workers cause positive impacts in the reduction of maternal-infant mortality. Other studies show that a low allocation of nurses increases in-hospital infections and average length of hospitalization. Finally, studies in 192 countries around the world show that where less than 25 doctors, nurses and midwives exist for every 10,000 people, it is unlikely that essential health services are adequate.

The WHO only uses the categories “doctors” and “nurses” to measure the shortage of human resources in health. You just highlighted the fact that countries with a lower ratio than 25 professionals per 10,000 inhabitants cannot offer a minimum level of coverage. Is there a similar calculation to assess the shortage of health technicians, in both rural and urban areas?

Actually, the studies that I mentioned are based on correlations and not formulas, although there are also planning methods that allow for the establishment of such measurements. In general, we prefer not to promote universal calculations of allocation of resources because the context, the concepts and the programs vary widely, even within the same country. Consequently, the allocation of health personnel requires analyses of needs and specific conditions. With respect

to health technicians, the WHO and PAHO are extending the studies to examine other professional categories which will progressively include technicians, which will in turn engender proposals regarding de minimus allocation. Presently, community health agents and nursing aids have already been included. As for urban-rural distribution, the category of technicians tends to comport the same way with as other professionals, with high density in the capitals and urban areas and decreasing density in sparsely-populated and rural areas.

In "Health in the Americas 2007", it was said that the issue of developing human resources in health did not occupy a significant place in the Region from 1980 to 2001. What types of human resources development are currently being promoted by PAHO and its Member States?

The 27th Pan-American Sanitary Conference ratified, in September 2007, the "Regional Targets for human resources for health 2007-2015". This document, which received broad support from the Ministers of Health of the Region, is comprised of a conceptual and referential body, and part policy, and set targets for each of the Critical Challenges identified in Toronto. Besides the policy goals of allocation, distribution and migration, much attention is given to targets associated with the development of human resources. These lines of development include aligning the skills of staff to APS, perfecting the abilities of workers by in-service continuing education, creating mechanisms for articulation and joint decision making among the educational and service institutions, ensuring continued learning, decreasing the student dropout rate, and improving educational quality through accreditation.

International migration of health workers has increased substantially in the last decades, further accentuating the seriousness of the crisis in health programs, especially in poorer countries. Is this a

regional problem? Which countries lose the most workers and which receive the most? The what extent will the new practice code for recruitment of workers which is being prepared by the WHO contribute to the improvement of the situation?

This process has become a critical factor in the provision of services and a social determinant of health. In the Americas, we have conducted regional and national studies that show flows to the U.S. and Canada, the United Kingdom and Spain, or even Italy and Portugal. There is also movement of professionals within the Region, mainly in the Caribbean, Central America and South America. The English-speaking countries in the Caribbean are those most affected by migration, particularly of nurses, but other countries in Latin America also suffer from the impact. Without exception, the migration of health personnel is a paradoxical situation for the countries because, despite the problems, the expenditures of migrants are an important contribution for some national economies. Another positive aspect is that the movement allows the training, exchange and enrichment of health care.

The practice code for international recruitment of health personnel is a complete work that the WHO wants to adopt and which includes specific guidelines for self sufficiency, improved working conditions, mutual benefits, and other facets of the problem. PAHO will work to disseminate, review and integrate the code in the Americas.

What are the prospects for technical cooperation among countries (CTP) in the area of health technicians in Latin America and the Caribbean?


The regional HR goals that I mentioned previously constitute the central proposal. With that in mind, it is important to emphasize the updating, strengthening and expansion of RETS, the diffusion and dissemination of information and knowledge about technical education

in health and the reorientation of technical education to public health and the APS, with emphasis on the ethical concepts, and the reaching of the millennium objectives. There is also the promotion of mechanisms for accreditation and certification of technical health staff and the introduction of continuing education processes in the services sector.

There are three groups of technicians that concern us and for which we are promoting special cooperation programs: the community health agents, who are key to ensuring high-level APS processes relative to promotion, prevention and early identification of health problems; the support staff who, in Latin American countries, provide approximately 70% of nursing aid; and the technicians of indigenous peoples and remote locations who require special efforts for training, improvement of working conditions and effective support.

Lastly, the horizontal cooperation among countries has been an important strategy in the area of education of health technicians, not only for the Region but also for the Portuguese-speaking African countries, through ties with the WHO.

How is the issue of social determinants of health being integrated into PAHO strategies and projects relative to the area of Health Technicians?

On the one hand, the reorientation of basic training of professionals and health technicians for Public Health and APS incorporates, in and of itself, the analysis of social determinants and is based on them. This is one of the regional targets that we are developing in favor of changing the basic study plans. On the other hand, the proposal of training about social determinants via the Virtual Campus is geared to educators in Public Health at a post-graduate level and begins in April of this year. There is even a module for self study that is available on the Internet for any health employee. (<http://dds-dispositivoglobal.ops.org.ar/curso>) 

ESTeSL, Portugal: “Health & Technology” obtain public recognition

On January 12, in the auditorium of the College of Health Technology of Lisbon (ESTeSL), students, educators, non-teaching staff and



guests met to celebrate the College's 28 years of the existence. The event was attended by the President of the Polytechnic Institute of Lisbon, Manuel Vicente Ferreira, and the attendees enjoyed a presentation from members of the Santa Cecília Academy of Music and the symposium “The College of Health Technology of Lisbon and the 10 years of EXPO '98”, prepared by architect Carlos Barbosa of the Expo Park.

As in previous years, 25-year medals were also handed out to professors and staff who had completed 25 years of service at the institution: staff members Ana Afonso and Zelinda Candeias, and professors Ilda Poças and Manuel Correia (in the photo, giving a speech). The certificate of public recognition, innovation and development of 2008 was given to the project of the scientific journal of ESTeSL - “Health and Technology”, launched in April. The ceremony ended, as is tradition, with the handing out of diplomas to the graduates of academic year 2007/2008.

EPSJV, Brazil: Seminar discusses health technician training in Mercosur

From November 24 to 26, at the Venâncio Joaquim Polytechnic School of Health (EPSJV/Fiocruz), in Brazil, the International Seminar “Training for Technical Workers in Health in Brazil and Mercosur” was held. At the end of the event, representatives from Argentina, Bolivia, Brazil, Costa Rica, Paraguay and Uruguay (see material on page 12), released the “Manguinhos Document on Technical Training for Workers in Mercosur”, with a record of the main issues discussed.

The document emphasizes the need to shift the emphasis of integration - “from economic and commercial agreements to true social integration that foment an effective improvement of living conditions in the populations of these countries” - and signals the important issues - regulation of labor relations, national and regional policies for education and health - and the challenges that must be overcome for the effective establishment of the free movement of workers between bloc countries. Moreover, it was noted that although technical workers represent the most significant portion of health services staff in health, not even one clear definition exists in the region of the meaning of the terms “health technician workers” and “professional health technicians”. In harmony with the participants of the seminar, we must continue to promote the policies of regional integration, through further discussion, projects and meetings.

Efos-SC, Brazil: 15 years of contribution to the SUS

On December 16, 2008, the School of Education in Health (Efos), of the State Department of Health of Santa Catarina (SES-SC), Brazil, brought together authorities in the area of Health, SES affiliates, regional coordinators and facilitators, students from the courses, and representatives of partner institutions and the community at large to a cocktail party to celebrate its 15 years. The showing of an institutional video with testimonials about the importance of Efos for technical skills training opened the event. Afterward, tributes were made and commemorative medals and plaques were distributed.

In his speech, the manager of the school, Leni Granzotto Coelho (in the picture, being honored), highlighted the modernization and innovation that is being experienced by Efos with the launch of a pamphlet for Community Health Agents and the creation of a website, which will soon go live. Health Secretary of State Carmen Zanotto then emphasized the role of Efos in training health teams who are more competent, humanized and effective. Ministry of Health representative Maria Aparecida Brito stressed the importance of the SUS Technical Schools for the qualification and training of professionals in the area, given the demands of the System.



12th World Congress on Public Health - “Making a difference in global public health: education, research and practices”

Organized by World Federation of Public Health Associations (WFPHA) and Turkish Public Health Association (TPHA), the event will address the challenges and opportunities for public health organizations worldwide, offering opportunity for professionals from around the world share the latest ideas and experiences in the field, including education, research and practices.

Dates: from April 27 to May 1

Location: Istanbul, Turkey

More information: www.worldpublichealth2009.org

57th Meeting of the International Statistical Institute (ISI)

The Directors of Human Resources of the World Health Organization (WHO) and the International Statistical Institute (ISI) are selecting work on the subject “Measuring inequality of workforces in health: methods and applications,” to be presented during the 57th biannual meeting of ISI. The abstracts should be sent by April 13. WHO may sponsor the appearance and presentation of up to four authors of selected papers. The objective of the initiative is to promote discussions on the measure of inequality in health and its ramifications in the planning and building health policies.

Dates: August 16 to 22

Location: Durban, South Africa

Submission of abstracts: before April 13

More information: Website of the WHO (www.who.int)> Programs and projects> Health workforce> 2009 events

XXII International Congress on Diagnostic Imaging and Therapy and III International Therapy Conference

The XXII Congress of the Latin American Association of Studies in Biology and Nuclear Medicine (Alasbimn) will be held in Cartagena, Colombia, November 4 to 7, with the theme “From controversy to clinical practice.” The III International Conference on Radiotherapy (ICRT), the IV National Congress and the I International Congress of Radiology and Imaging Technology in Diagnostic Imaging and the Regional (Ecuador, Venezuela, Colombia) in the area of Nuclear Medicine will take place simultaneously.

Dates: November 4 to 7

Location: Cartagena, Colombia

Submission of abstracts: June 8 (ICRT III) and July 1 (XXII Congress of Alasbimn)

More information: www.alasbimncolombia2009.com and www.icrt-09.warmolth.org

publications

Human Resources for Health



Human Resources for Health is a free and universal electronic scientific publication covering all aspects of planning, training and management of health personnel throughout the world. Its objective is to disseminate

research related to the area of human resources for health, encouraging discussion of previously-neglected issues. Published by Biomed Central, an independent publishing house, with support from the World Health Organization (WHO), the journal editor in chief is Brazilian Mario Roberto Dal Poz. Its editorial board consists of 40 recognized experts from several countries.

Authors interested in publishing articles in the journal should send their manuscripts according to the Subscription Manual for Authors. Although published only in English, the magazine provides editorial support to authors who write original material in other languages.

For users who register, the magazine sends electronic messages with summaries of the latest articles published, enabling them to remain continuously updated.

More information: <http://www.human-resources-health.com>

Development Plan for Health Personnel with goals for 2015 - Mozambique

On October 29 in Maputo, the National Plan for Development of Human Resources for Health 2008-2015 (PNDRHS) was launched in Mozambique. With the theme “Health Workers, adequate and competent enough for more and better health services for the Mozambican people”, the PNDRHS was developed with support from the World Health Organization (WHO). The document is based on acknowledgment of the need to address issues such as lack of training capacity, low pay, low motivation, “brain drain” to the private sector, limited management capacity and a serious lack of workers in the health sector.

The government’s proposal is to increase the total number of health workers in the country by approximately 80%, which would augment the current number of 25,683 (1.26 per 1,000 inhabitants) to 45,904 (1.87 per 1,000 inhabitants), in 2015. This measure, which according to the document depends directly on greater interaction between the Mozambican Ministry of Health and training institutions, is considered essential to strengthen the national health system and enable the achievement of the Millennium Objectives (ODM) in the area established by the United Nations (UN).

PNDRHS (in Portuguese): http://www.who.int/countries/moz/events/hrh_booklet_summary_pt.pdf

PNDRHS (in English): http://www.who.int/countries/moz/events/hrh_booklet_summary_en.pdf

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Health Technologies: one trend, many realities

In recent decades, mainly after the 2nd World War, mankind has experienced incredible technological advances that have revolutionized all areas of activity and all sectors of society, increasingly requiring well-prepared professionals capable of dealing satisfactorily with these new technologies.

The health arena is no different, and various technologies are gradually being incorporated into services, significantly changing the configurations of health care programs and adding great shifts in medical care, in addition to requiring a constant evaluation of the minimum levels of knowledge and training necessary for the execution of professional activities in the sector.

In this process, and with great particularities, some countries such as Cuba, Costa Rica and Portugal have opted to form health technician training courses under the common name of "health technologies" or, in the case of Uruguay, "medical technologies."

"These professions emerge from developments in science and technology as applied to health, especially to medicine, with a strong scientific foundation, following the great discoveries of the nineteenth century in the field of biology, physics and chemistry", says the professor-coordinator of the Cardiopulmonology course and vice chairman of the board of the College of Health Technology of Lisbon (ESTeSL), João Lobato.

Health Technologies

In health, the term technology is still widely used as a shortcut to refer to equipment or medicines. The term, however, must be understood as a set of tools, including work actions, which set in motion a transforming action of nature. Therefore, the concept should include the knowledge and actions needed to operate them: knowing and its procedures. The contemporary meaning of technology, therefore, relates to the tangible and intangible resources of technical acts and work processes without, however, merging these two dimensions. Furthermore, given the great development of scientific-technical knowledge of today, the component of knowing the technology gains additional quality and social status. In her studies, the medical sanitarian Lilia Schraiber refers to technology as a knowing that, if you already have high-quality acts to facilitate technical acts (changing things by manual intervention), is constructed, valued and seen above all by those who possess complex knowledge: "a theoretical knowledge. A theory of practices or method of practice." The science of the technique, as some authors say.

Source: Dictionary of professional education in Health (Rio de Janeiro: EPSJV, 2006)

In Portugal, influences of the Bologna Process

Begun more than a century ago, in the exclusive context of work, training of health technicians in Portugal has undergone many changes, both in the level of enrollment and the degrees conferred by the courses.

More recently, the history of formal education of health technologies can be divided, according to sociologist David Tavares, professor-coordinator of the Scientific Area of Sociology and Chairman of the Scientific Council of ESTeSL, into two phases. “The first starts at the beginning of the 1960’s, during the dictatorship, with the creation of Centers of Preparation of Technical and Auxiliaries of Clinical Services (CPTASC) who worked in hospitals in central Lisbon, Porto and Coimbra, with different levels of non-senior training, under the guidance of the Ministry of Health and Welfare,” he states.

“With the end of dictatorship in 1974, these courses became extinct and by 1980 no kind of training was recorded in this area, in other words, there was a complete interruption of training in all areas of health technologies for six years (1974-1980). The second phase begins in the early 1980’s, with the creation of the Technical Schools of Health Services and continues with its absorption into polytechnic higher education in 1993, when they received the designation of the Advanced Schools of Health Technologies (ESTeS) and started granting the title of bachelor”, he adds.

In 1999, the Portuguese courses were organized into two cycles, with students receiving a **bachelor** of science degree after the first, with duration of six semesters, and **graduate** at the end of the second cycle, with two semesters of study.

The level of *bacharel* permits the professionals to integrate into health teams, equipping them to “development activities at the level of clinical pathology, immunology, clinical hematology, genetics and public health through the study, implementation and evaluation of independent analytical techniques and methods with a few to diagnosis and screening”. (Decree-Law No 564/99 - Portugal).

The level of *licenciado* consolidates and reinforces the knowledge and skills of design, planning, organization, implementation and evaluation of work processes, independent of the levels of healthcare provision and management/coordination.

Later that year, the legal status was granted to the public program of Diagnostic and Therapeutic Technician, which fits a set of categories of specialized professional training at a senior level. Currently, the program consists of **18 recognized** and regulated professions.

According to Professor João Lobato, in Portugal there are currently 22 public and private higher education institutions which offer health technologies programs at the rate of 3,700 vacancies per year. “In the last ten years, the supply of graduate courses in this area has increased as a result of the growing affirmation of identity and autonomy of these professionals in health care teams”, he states.

In the country, beginning in 2008, the undergraduate courses in health technologies were harmonized to meet the requirements of the **Bologna process**, and began to appear in proposals for secondary and tertiary level courses - master’s and doctorate - in the area.

Executed in 1999 by the Education Ministers of 15 European countries, the controversial Treaty of Bologna provides for the creation of a European Higher Education Area, in which students have facilitated mobility and multi-validated credits.

The main idea of the Bologna Process is the equalization of national systems of Higher Education, the “3 +2 +3” system – three years for graduation, two for a Master’s Degree and three for a Ph.D. – or, in some cases, 4 +1 – four years for graduation and one for a Master’s Degree – providing for sensible reduction in the total time of training, which today is more than ten years. The process has generated protests in several countries for increasing, according to its critics, the commercialization of education, that is, the adaptation of educational programs to the needs of businesses.

Clinical Analysis and Public Health, Pathologic Anatomy, Cytology and Tanatology, Audiology, Cardiopulmonology, Dietetics, Pharmacology, Physiotherapy, Oral Hygiene, Nuclear Medicine, Neurophysiology, Orthoptics, Orthoprosthetics, Prosthodontics Dentistry, Radiology, Radiation, Speech Therapy, Occupational Therapy and Environmental Health.

As regards future trends, David Tavares believes that they depend on contingent factors and are therefore difficult to predict, but he conjectures: “The socio-professional groups that comprise the program of diagnosis and therapy technician tend to express collective feelings of relatively strong belonging the group usually referred to as health technologies, which can be an important factor in the redefinition of public service careers in Portugal. Moreover, the trend is that a growing percentage of professionals in these areas will develop their activity in the private sector, in which professional practice is generally not regulated by a career”.

He says another very likely trend is related to the inclusion of training profiles of other specialties, such as podiatry technicians and medical emergency technicians, for which there is no recognized training at higher education levels in Portugal.

In Cuba, “Battle of Ideas” and Universalization of Higher Education

By the end of the 1980’s, the vast majority of technical workers in the Cuban health system was of average level. With the “**Battle of Ideas**”, several revolutionary projects were implemented, among them developing a new pedagogical profile: the health technologist, which began in 1989. At that time, the Superior Institute of Medical Sciences of Havana implemented a trial course in Bachelor of Technology in Health for technical

Set of strategies and programs used by the Cuban government to address the “special period”, i.e., the economic political and social crisis occasioned by the fall of the Soviet Union.

workers, with six output profiles - Cytohistopathology, Laboratory, Imaging, Optometry, Rehabilitation, and Hygiene and Epidemiology.

In 2002/2003, a new variation was introduced into training – emergent courses, open to young people who completed 12th grade and with no work experience requirement – characterized by intensive studies of short duration, with guaranteed continued of higher education (see material on page 11). At the end of the following year, with the creation of the College of Health Technology (Fatesa), the course will comprise, together with the careers of Medicine, Dentistry and Degree in Nursing, a cluster of top-level academic training in the health field.

With a duration of five years, the course is structured in three levels, with two intermediate exit points: the first, which lasts one year, trains basic technicians with immediate placement in the healthcare system; the second level, for workers, with at least two years' duration and graduation as a senior technician; and a third level, also lasting two years, provides graduation with a Degree in Health Technology, that is, a university-level professional.

According to the researchers Marta Pernas Gómez and Carmen Garrido Riquenes, in the article “History and new challenges in the training of health technicians in Cuba”, the intermediate exit points are a very important step for the optimal utilization of the potential of each individual student. The idea, according to them, is that the system encourages the continuation of studies, so that everyone can reach, at his own pace, the last level of training.

Currently, the Bachelor of Technology in Health in Cuba consists of 21 profiles, with courses offered in most provinces of the country and has about 80,000 students enrolled.

Costa Rica and Uruguay: in search of integral training

In Costa Rica, it is the School of Health Technologies, which until 2005 was a section of the Faculty of Medicine at the University of Costa Rica, which promotes the training of professionals in specific areas of health technologies.

Physical Therapy and Rehabilitation; Clinical Laboratory; Imaging; Transfusion Medicine; Optometry and Optics; Dental Care; Hygiene and Epidemiology; Podiatry; Dispensing Pharmacology; Cytohistopathology; Nutrition and Dietetics; Speech Pathology and Audiology; Occupational and Social Rehabilitation; Dental Prostheses; Medical Radiophysiology; Health Records, Information and Informatics; Microbiology; Electromedicine; Administration and Economics; and Traumatology.

The institution offers courses in eight specialties: Medical Emergencies, Urology, Orthopedics, Ophthalmology, Gastroenterology, Dissection, Electroencephalography, and Electrocardiography. The study plans are approved by the National Accreditation System of Higher Education (Sinaes) and seek to promote the commitment of future professionals in social health production, teamwork, quality of care and consolidation of the National System of Health

According to Professor César Alfaro Redondo of the School of Health Technologies, during the international seminar held in November in Brazil at the Joaquim Venâncio Polytechnic School of Health (EPSJV/Fiocruz), the curriculum review is always much debated, but there are other challenges which need to be overcome. “We think that courses may seek to become higher level, as with the Environmental Health and Physical Therapy course, which would be the common core between them and which could later be transformed into specialties, but above all, we discuss what the ethical component should be that permeates the training of technicians”.

He said experiences in other countries have been important in discussions that seek to improve the Costa Rican system of health technician training.

In Uruguay, the institution responsible for health technician training is the College of Medical Technologies (EUTM), established in 1950 within the Faculty of Medicine at the University of the Republic as a “Section of Medical Aids”. In 1994, the College assumed its university character.

Today, of the nearly 100 undergraduate courses at the University of the Republic, 27 are in the health area. Of these 27, 21 are in the Faculty of Medicine, 18 of which are offered by EUTM (17 in Montevideo and 10 in Paysandú).

Of the 18 courses, 11 are degree-level - Physiotherapy, Speech Therapy, Imaging, Surgical Instrumentation, Clinical Laboratory, Cardiopulmonology, Clinical Neurophysiology, Ophthalmology; Psychomotricity, Medical Records, with intermediate exit points such as in Technologist in Medical Records, and Occupational Therapy – three train technologists only – Cosmetology Medical, Radiation and Occupational Health – and four are technical – Hemotherapy; Medical Podiatry, Pathological Anatomy and Radioisotopes.

The director of EUTM, Juan Mila, during the Mercosur Seminar (see material on page 5) affirmed that the profile of the technician includes only the “doing”, the technical dimension of the work; and the profile of the technologist, whose training process adds not only a solid technical training but also didactic materials such teaching, psychology, scientific methodology, public health, ethics and labor law and hospital administration, integrates a social action angle.

The degree courses, four or more years in duration, provide important training and a strong relationship between theoretical and practical training, with the first being at least 40% of the total working hours. Students submit final paper and the end of the course and in several cases must undertake a compulsory internship.

Currently, there are over 10,000 enrolled and about 3,000 students in courses whose curriculum adds knowledge, aptitudes and attitudes appropriate to each profession and others common to all of the curricula. The idea is to form a professional perspective that meets the scientific, humanistic, social and ethical practice of health technologies. 📌

Contributor: Ana Luisa Raposo (ESTeSL)

Health Technician

The importance of health technician workers in curative and preventive actions and their increased responsibility within the health systems are cited frequently in documents dealing with the matter. The issue is knowing exactly to whom the texts refer, once the very World Health Organization (WHO) itself drew attention to them, in its 2003 report (pg. 112), for different levels of training and the variety of titles used to designate these professionals, who form a significant cohort of the sector's workforce.

Although the word "technician" has some specificity, its real meaning varies according to the social, political, economic and cultural contexts that define the different national educational systems as well as the characteristics that health-related work entails in each case. Over time, each country has promoted the training of assistants and technicians in accordance with their specific needs, each country giving them unique names. The result is that, considering the number of countries, we find different titles for professionals with similar training or the same title applied to professionals with different training and responsibilities.

The term "health technician" is often used indiscriminately to represent a wide range of workers who perform some type of technical-scientific activity in the area, considering not only those with only elementary level of schooling, such as health workers recruited in communities but also those technical assistants who completed fundamental training and the mid- or senior-level technicians of various specialties.

In the Americas, discussions begin in 1975

In the Americas region beginning in 1975 at the "1st Meeting of the Study Group of Intermediate Level Health Human Resources", held in Venezuela, several events were organized to discuss the issue.

Given the difficulty of establishing a relatively homogeneous concept of the term "health technician", due to the large fragmentation of criteria and concepts concerning the training and use of such workers, one option was to suggest that, despite the term used to designate these professionals, its definition includes the following aspects: the difference between the technician and other professional categories of greater or lesser qualifications; inclusion of mandatory training for legally established courses; institutions able to undertake the training such personnel; minimum schooling requirements to begin their studies in any specialty in this category; and duration of training courses.

Under this proposal, in 1996, the Pan American Health Organization (PAHO/WHO) established, according to the report "Meeting the training and use of mid-level technicians in health," the following general definition: "The 'health technician' is the one professional who performs specific fundamentally systematized actions in the health field and makes decisions within his area of competence. He collaborates with senior staff to facilitate the best utilization and efficiency of health services. He performs his work under direct or indirect supervision by senior staff, and may supervise employees of equal or lesser qualification. The complexity of their actions is greater than that of professional aids and less than that of professional-level (or equivalent) staff. The

Separate job postings; simple and routine tasks, generally prescribed; intense technical division of labor, with the separation between design and execution and a large contingent of workers with low autonomy to intervene in the work process.

technician obtains qualification through legally-recognized courses in education centers approved in accordance with the legal requirements of each country".

New contours to definition in RETS

In RETS, the matter has been widely discussed since its creation in 1996, but without achieving success in establishing a common-sense method of classification. Accordingly, the proposal is to build a framework for classification based on parameters that allow for a first approach among the diverse realities in the countries that comprise the Network.

While acknowledging that the proposed definition by PAHO is consistent with an organization of health work that, strongly influenced by the medical-industrial complex, still has strong **Taylorist/Fordist components**, the RETS proposes an addition to the definition, seeking to incorporate, in addition to the operational dimension, the sphere of knowledge, skills and values that structure both the work processes and social relations: "The training of the technician is based on the sound basis of general knowledge provided by both the basic education and the technical training, which integrate scientific-technological and sociopolitical knowledge, necessary for the techno-professional and social exercise with responsibility, autonomy, commitment and ethics". ("Bases for a development plan for health technicians", 2005)

"Technician training should be reconsidered, because in addition to technical knowledge, the worker must have a broader view of the work process into which he will be inserted, in addition to the social determinants that affect people's health, and thus

be equipped with the knowledge needed to contribute to changes aimed at improving the health of populations”, explains the coordinator of International Cooperation of the Joaquim Venâncio Polytechnic School of Health (EPSJV/Fiocruz) and the Executive Secretariat of RETS, Anamaria Corbo. “Ethical training is also essential, with an emphasis on the principles of equality and respect for the dignity of people”, she adds.

In May 2005, representatives of 14 institutions in seven countries of the Network - Angola, Brazil, Colombia, Costa Rica, Cuba, Mexico and Uruguay - gathered in Cuba during the “1st Congress on Health Technologies”, resumed the discussion. At the meeting, they explained the definition of technical workers, according to the configuration of the national areas of education and health, and identified the careers of training technicians, according to the requirements for admission, duration, certification and graduation profile, with a view to potentially establishing a process of categorization of the different levels of training of technicians. “The presentations showed 13 different names for these levels, and showed that the tasks and situations that employees experience in their work processes differ from country to country, even if they receive the same designation in terms of level of technical training”, Anamaria

Biodiagnostics, Nursing, Statics, Pharmacy, Hemotherapy, Nutrition and Dietetics, Radiology and Health Diagnostic Imaging, Rehabilitation, Oral Health, Visual Health, Health and Safety at Work, Health Surveillance, Physical Education, Medical-Hospital Equipment, Health Management, Community Health, Alternative and Veterinary Therapies.

Health workers, according to the WHO

For the WHO, the health system is the set of all activities whose primary goal is improving the health of people. In this sense, all those who are engaged in actions geared primarily to the promotion and restoration of health, including family caregivers, part-time workers (especially women), health volunteers, midwives and community workers, are considered “health workers.”

For statistical purposes, the WHO divides the workers into nine broad categories, which include various levels of professional training (assistants, technicians and aids), and can be broken down into 18: (1) doctors, (2) nursing and obstetric personnel, including professional midwives, (3) dental personnel; (4) pharmacy personnel; (5) health laboratory; (6) environmental and public health workers; (7) community and traditional workers; (8) other health professionals, including nutritionists, occupational therapists, psychologists and speech therapists, among others; and (9) management and support staff, such as statisticians, professionals and technicians of medical records and health information, ambulance drivers and maintenance and service support staff, among others.

The WHO estimates that worldwide there are about 60 million health workers, working full time in companies and health institutions or in healthcare functions in organizations outside the health area. Of these, about two-thirds are health services providers while the remaining third is composed of management and support staff.

recalls, stressing that the definition of the areas of training was the major point of progress achieved at this meeting.

Examples show the complexity of the problem

In Brazil, the technician course, which is of a 1,200-hour minimum duration, is usually a function of secondary education and can be taken either “concurrently” or “via integration” by students who have completed primary schooling (9 years of formal education), or “subsequently” for students who have completed high school (12 years of formal education). The technician is a mid-level professional.

In Paraguay, Uruguay and Argentina, the technicians have the same education enrollment level as in Brazil (post-secondary), but are considered senior professionals, and the training varies from 1,000 to 3,800 hours depending on the

area. In some cases, the technician is able to continue his studies until he obtains a degree in any career.

In Bolivia, a technical career is divided into three distinct levels, all with post-secondary educational entry requirements: the aid, with 1,800 hours of training, the mid-level technician, with 2,400 hours, and the senior technician, with 3,600 hours.

In Mozambique, the current legislation provides for technician training at two levels, with post-secondary entrance requirements (10 years of formal schooling): the mid-level technician medium, graduating in 24-30 months, and the technician specialist, with over 12-18 months of study.

In African countries in general, though currently the subject of implementation of various strategies for qualification of these professionals, one still frequently finds technicians trained only in services. ❏

The network of Polytechnic Schools in Cuba

Begun in 1889 with the creation of the first school of nursing, the history of Cuban training of health technicians up to 1958 is without much fanfare. This year, besides the doctors, there are a little more than 1,500 technicians working in public services, mostly with low level of education and skills acquired on the job. After the revolution, the requirements of the new society, within the realms of both education and health services, impressed major transformations in the vocational training policy in the health area. Among the various steps of the process, the highlight is the establishment, after 1976, of a network of Polytechnic Schools of Health, responsible for training thousands of professionals.

“An important element in the organization of health education in Cuba was the network of polytechnics, spearheaded from 1983 by the National Center for Technical Improvement (Cenapet), which undertook the development of new curriculum designs for Health Technician Specialists with a student admission level of 12th grade and three years in duration. At the time, among many other activities of an academic and educational nature, strategies were established for the training of educators, the Che Guevara Outstanding Health Technicians organization was founded, and basic post-graduation courses were established, as a way of assisting graduates, rolling out in a large way the technical training across the country”, says the dean of the School of Health Technology of the Higher Institute of Medical Sciences of Havana (Fatesa/FSCM-H), Julio Pineda Portal.

Universal access to health requires accelerated training of technicians

Before the revolution of 1959, Cuba had a situation typical of a slowed and dependent economy. In the field, where large swaths of sugar plantations existed, 75% of the lands were in the hands of 8% of the owners. Almost half the population from 6 to 14 years old did not attend school and, among the population with greater 15 years of age, the average was only three years of formal study. The capital, Havana, with about 22% of the population, was the concentration point of more than 60% of the doctors and available hospital beds. Much of the population, especially in rural areas, had no access to health services, which were inadequate and of low quality.

The revolution established, under the responsibility of the Ministry of Public Health and in accordance with guidelines established by the Ministry of Education, a policy of accelerated training of mid-level technicians and aids based on the following principles: centralization of standards; decentralization of courses (training next to the future workplace); short-term training of technical aids able to provide a minimum coverage for the people; link between study and work and between services and teaching; and increasing the abilities of trained aids after a certain period of time working.

From 1959 to 1964, decentralized courses were created for nursing aids and other specialties with six months' duration, for students with a 6th-grade education. Technical courses were also established with 18 months of duration and 9th-grade educational requirement for entry, as well as basic post-graduation courses for the training of nursing instructors. At this stage, according Roberto Hernandez and Elias Miguel Marques in the article “Mid-Level Medical Teaching in Cuba”, more than 8,000 thousand technicians and aids were trained.

Polytechnic education

For many, the concept of “polytechnic education” - or “technological education” - as proposed by Karl Marx in the mid-nineteenth century, expresses the Marxist concept of education, which includes three complementary dimensions: the intellectual; the body, referring to the practice of sports and physical activities; and technology itself, tied to the understanding of general and scientific principles and art of management of tools essential to the production process.

In general, one can understand the polytechnic as a pedagogical principle that unites, in the educational process, theory and practice, school and productive work, enabling students to understand reality, assimilate scientific knowledge and radically transform society.

Public education, free, compulsory and only for children and adolescents; the combination of the three dimensions of education with production, to allow the overcoming of the historical distinction between manual labor (execution, technique) and intellectual labor (design, science); omnilateral training (multilateral, integral) that enables the human being to produce and harness science, art and technique; and the integration between school and society, in order to merge the educational practices with other social practices, are considered fundamental aspects the Marxist educational concept.

Source: Dictionary of professional health education (Rio de Janeiro: EPSJV, 2006)

From 1965 to 1969, technician training in Cuba was consolidated. The availability of decentralized courses increased for technicians and aids of various specialties. More than 15,000 professionals graduated.

In the third stage (1970- 1975), a major review of the qualitative aspects of teaching takes place and the foundations for the creation of the network of polytechnic schools begins. Highlights of the achievements made are: coordination of plans for the study of technicians with general education; technical assistance training for all schools in the country; intake of qualified educators; and accreditation of the new levels of scholarship acquired by the med-level technicians.

Such measures resulted in an increase in the number of schools of nursing, which reached 36; the creation of 16 teaching units to train mid-level technicians in 28 different specialties, decentralized in all provinces; the extinction of almost all courses for aids, except for nursing aids and dental assistants; the creation of new technical expertise to meet the demands of the health system; the extension of study plans to three years in almost all technical courses; and the establishment of 500 institutions and health units as areas of practical experience for students. At this stage, more than 20,000 new professionals completed their courses.

Polytechnics: integral training to improve the quality of the system

With momentum, the system of training mid-level technicians in Cuba was changing to meet the demands of the health system and the imposition of an educational system that gradually universalized population access to increasing levels of education.

After 1975, the implementation of a program of building new schools physically prepared to meet the needs of whole technical and vocational training was implemented, three years in duration and for students with a 9th-grade education (“basic secondary”): the Polytechnic Schools of Health. These schools, as described by Elias Roberto Hernandez and Miguel Marques, had a capacity of 1,000 students, mostly internal, imbued with modern teaching resources as well as sports, recreational, cultural and laboratory areas, which would deepen the integral training of students.

At this stage, in order to rationalize the number of courses without losing the diversity of exit profiles, all curricula and programs of study were reviewed, adjusting them simultaneously to Marxist-Leninist philosophies, the needs of society, the national health policy health, and the educational targets, purposes and objectives.

The preparation of materials to support the teaching-learning process; the polishing of teaching staff; the gradual elimination of training courses for assistants in order to establish only three levels of technical education – average, specialist and university; and articulation of secondary education with senior-level careers that were commensurate with the same basic profiles of the mid-level technicians were some aspects which punctuated this phase. In 2001, Cuba had 55 polytechnic institutes of health.

Universal access to university education determines changes in polytechnics

Advances in health and education, which took place in Cuba during the same period of difficulties imposed by

the end of the socialist bloc in Eastern Europe, required a constant improvement in training programs for health technicians and increased the need to promote continuity of higher education for graduates of technical training programs. Accordingly, in 1989, a Health Technologies Degree program was created in the subsystem of the country’s Medical Education.

In 2002, a new variant of training was instituted: the emerging courses for Basic Health Technicians, characterized by intensive studies of short duration, with guaranteed university studies. The Dr. Salvador Allende Polytechnic Institute of Health in Havana was transformed into the Emerging School of Health Technicians and, simultaneously, the Health Technologies program began a reformulation to attend to young people with 12th grade educations and no professional experience as a technician. In 2003, the Emerging School of Havana was transformed into the School of Health Technology (Fatesa), which operates under the Higher Institute of Medical Sciences of Havana (ISCM-H).

In 2004, to provide the same opportunity to the thousands of technicians trained by the network of polytechnic schools, the “New teaching model” was implemented, whose curriculum design was characterized by training in cycles – basic, technical and professional – at the end of which process the students exit with a senior title. A strong process of integration of technical education with the university begins throughout the country and, gradually, the old polytechnic institutes are converted into colleges which are spread over the 169 Cuban municipalities. 🏠

Read more:

- ‘Mid-Level Medical Teaching in Cuba’, by Roberto Hernandez and Elias Miguel Marquez. (<http://hist.library.paho.org/Spanish/EMS/4445.pdf>)
- ‘History and new challenges in the training of health technicians in Cuba’, by Marta Perna Gómez and Carmen Garrido Riquenes (http://www.bvs.sld.cu/revistas/ems/vol18_4_04/ems02404.htm)
- ‘Health for all is possible’ (Cuban Society of Public Health, 2005)
- ‘V Anniversary of the Health Technologies Training Program’, by Julio Pineda Portal (http://www.ucmh.sld.cu/rhab/rhcm_vol_7num_1/rhcm01108.htm)

Project evaluates professional education in the Mercosur

Since 1991 when it was created by the Treaty of Asunción, the **Southern Common Market (Mercosur)** has generated a growing process of economic integration among bloc member countries. The change of the current emphasis of integration, centered on commercial agreements, for a true social integration capable of improving the living conditions of the populations of these countries, however, continues to represent a major challenge for national governments.

The regulation of free labor movement, for example, depends, among other things, on reciprocal curricular recognition and the existence of special mechanisms of professional qualification.

With regard to issues of professional education in health, the need to reduce the current state of mutual ignorance among Mercosur partners led a group of researchers, headed by Marcela Pronko of the Joaquim Venâncio Polytechnical School of Health (EPSJV/Fiocruz), Brazil, to submit the following project to the National Council for Scientific and Technological Development (CNPq), the promotional agency linked to the Ministry of Science and Technology: “The professional education in health in Brazil and the Mercosur countries: perspectives and limits for the integral training of workers amidst the challenges of health policies” (Mercosur Project), approved in late 2006.

Grants to national policies and for international cooperation

With the general objective of identification and analysis of the quantitative and qualitative supply of technical health education in the Mercosur countries to support policies of organization and strengthening of health systems and international cooperation, the project consisted of two stages: one in Brazil and the other internationally. Although still in the process of inclusion and not yet full members of Mercosur, Venezuela and Bolivia were also included in the study – Venezuela, due to its increased participation in discussions about technician education within the bloc, and Bolivia for its history of cooperation with EPSJV, through a project of cooperation among countries (TCC - Bolivia, Brazil and Paraguay).

According to the authors, the quantitative dimension of the research, conducted through consultation of existing databases, would define: the number of teaching establishments, their geographic distribution, legal status and administrative dependence; the types of courses; the courses offered according to sub-areas; models and curricular guidance; and teaching modalities. The qualitative dimension, in turn, would involve five axes – Political Pedagogical Project; Policy in Health Professional Education; Curricular Organization and Development; Competencies; and qualification of faculty – and would be performed by questionnaires and documentation collection.

Besides the research itself, the project provided for the holding of an international seminar, in which national leaders responsible for policies concerning the education of health technicians in bloc countries and Bolivia, representatives of Mercosur member countries in the subgroup of health work - the SGT-11 - and in other instances the subgroup of negotiation, professionals, researchers and students from the six countries could assess and discuss the

The Mercosur

The Southern Common Market (Mercosur), the integration project conceived by Argentina, Brazil, Paraguay and Uruguay and established on March 26, 1991 by the Treaty of Asunción, has economic, political and social dimensions.

In addition to the four original countries, Venezuela is a country in the subscription process, and Bolivia, Chile, Colombia, Ecuador and Peru are Associate Countries. The Associate Countries can participate in meetings of the institutional structure organisms of Mercosur to address issues of common interest, but without voting rights. Recently, Bolivia signed an agreement with Mercosur, with a view to future subscription to the bloc.

Source: Brazilian Mercosur website (<http://mercosul.gov.br>)

preliminary findings of the study. The International Seminar “Training for Technical Health Workers in Brazil” was held from November 24-26, 2008, in EPSJV/Fiocruz (see material on page 5).

In Brazil, training is still defined by the market

In the national stage, the starting point was to send by mail a questionnaire for the 1,636 public and private institutions offering technical courses in health included in the National Register of Technical Courses (CNCT) of the Ministry of Education (MEC). Among the respondents, 36 were selected for the phase of qualitative interviews. In this phase, which aim was to identify the theoretical and methodological guidelines and the material basis of the organization and curriculum development in health professional education in Brazil, the team had the EPSJV support of six Unified Health System professional technical schools (ET - SUS). “Due to the size of the country, it was impossible for the Rio

de Janeiro based team to mobilize to conduct the interviews. We opted to work with researchers of the so-called **Pole-Schools** located in the five regions of the country and chosen with the help of the RET-SUS Coordination Commission,” explains Marcela.

The ETSUS Tocantins, the Dr. Manuel da Costa Souza Staff Training Center for Health Services (Cefope/RN), the Technical School of Health of the Primary and Secondary Education Center of Unimontes (MG), the ETSUS Blumenau, the School of Public Health of Mato Grosso (ESP-MT) and the Nurse Izabel dos Santos School of Health Technician Training (ETIS/RJ).

In the quantitative stage, the research showed that from 2001 to 2005, the number of public and private health technician training establishments increased from 814 to 1,535, while the number of courses offered went from 1,262 to 2,554. Almost 60% of the courses are licensing, the courses in nursing, the area of the most investment in training, representing close to 40% of the total. Most courses (58%) are of the “subsequent” modality, that is, the student does the course after high school, and are organized into modules.

Interviews in the qualitative stage, in turn, the applicant reference to “market” or the “labor market” on several issues suggests a strong determination, both in the institutional profile and in the pedagogical choices made by the schools. According to the researchers, this determination seems to be stronger than the actual policy for professional education and health education that guides the actions of those institutions. “Even though we observed an institutional effort toward legal adequacy, the adequacy to the demands of the market constitute a matter of survival for many”, says Marcela.

National Director of Human Capital and Occupational Health (Argentina); Bolivian-Japanese Technical School of Health with Andean Cooperation and National School of Public Health (Bolivia); Joaquim Venâncio Polytechnic School of Health (Brazil); National Institute of Health (Paraguay); School of Medical Technologies of the University of the Republic (Uruguay).

As for pedagogical concepts that guide school practices, research has shown that they are the result of several references, with a predominance of curriculum concepts and methodologies coming from traditional teaching, intermingled with other more or less formalized models. “Taken together, we can understand the characteristic elements of a predominantly instrumental training of health technicians, training without much consideration of the socio-scientific foundations of their work”, notes the coordinator of the project.

Difficulties determine changes in the international segment of the project


The original idea behind the Mercosur Project was to replicate the work done in Brazil in the other countries. This, however, was not possible. “First of all, in other countries there is no consistent database that could be used as a basis of study”, Marcela justified.

The difficulties, according to the researcher, led to a methodological change. “We decided to survey the national standards governing the operation of these schools, which led to a survey of the educational system, health system and forms of regulation of health work in each country,” she explains. “In Uruguay, for example, there is virtually a single institution responsible for training and regulation, the University of the Republic, which is very different than that found in Brazil”, she clarifies. The level of training was another difference observed by the team. While in Brazil, the “technician training” is mid-level whereas in the other countries that participated in the study, it is legally at the senior level. “Before the study, which identifies the chasm of ignorance that exists in this area, we had no idea about [the difference in definitions]”. Although in accord with

Marcela, a few observations have nonetheless led the team to believe that further study of the issue could show that the training, be it mid-level or senior, is equivalent.

For researchers, the large merit of the project in its international phase was to show the diversity of situations and the need to cogitate further studies capable of demonstrating that the training in fact is as different in practice as it is on paper. Beyond the contradictions between the countries, the study identified several controversies at the national level that can become a problem when you think about the homogenization of health technician within the Mercosur.

“The free movement of workers between bloc countries makes harmonization essential, both with regard to professional certification as to the regulation of work, issues that, although confluent, are often the purview of different sections of the government. The regulation of labor occurs within the Ministry of Labor and, in the case of research, also in the Ministry of Health. Professional certification, though, is generally the responsibility of the Ministry of Education”.

Another major achievement of the project, according to its coordinator, was the International Seminar, in which the people who deal these issues in each country were able to meet and exchange ideas. “Not only the representatives of the GT-11 countries of the Mercosur, which historically meet from time to time, but also those responsible on a national level for training policies who had no idea of how things took place in other countries. There is a dissonance between the instances of international cooperation and the formulation of national policies, and this makes any attempt to articulate and harmonize the policies of worker training very difficult”, she comments, recalling that the idea is for the project to have continuity by studies developed in conjunction with **RETS member institutions** from various developed countries. 

The role of labor in the strengthening of the APS

In his first issue, RETS Magazine sketched an overview of the World Health Report 2008 – “Primary Care: now more than ever”. In the article, which marks the 30-year anniversary of the Declaration of Alma-Ata, the World Health Organization (WHO) highlights the importance of Primary Health Care (APS) to build stronger and more equitable national health care systems.

In an effort to improve the response of countries in relation to primary care, allowing real changes in global health, the paper proposed four reforms: the first, in favor of universal coverage, to ensure that systems contribute to health equity, social justice and the end of exclusion; the second, the reorganization of primary care services, to create systems based on the needs and expectations of people; the third, public policies to protect and promote the health of communities; the last, the leadership to create more participatory management models capable, through dialogue, of addressing the complexity of health problems.

According to the report, three factors are essential to boost the proposed reforms: the mobilization of knowledge production, the participation of the people, and the commitment of health professionals.

The importance of collaborative networks and the role of society

Firstly, the article states the need to review the health policy of countries, to promote imagination, intelligence and ingenuity in the organizations, and stresses: “The practical knowledge necessary to carry out such reviews of policy already exist, but it must be more

explicitly articulated and be refocused on continued improvements in each of the four linked sets of reforms of primary care, in the identification of the technical and political obstacles that oppose its progress, and in the application of the elements required to correct the course when necessary”.

The WHO also emphasizes the importance of collaborative networks between countries and within countries to achieve the critical mass needed to drive and implement the reforms and international cooperation initiatives, capable of overcoming the gaps in terms of capacity of each individual country.

In the case of popular participation, the WHO is assured that the implementation of primary care by the health sector and political circles is often a response to increasing demand and pressure from the community: “In civil society there are powerful allies in favor of the reform of primary care who can make the difference between a well-intentioned effort with limited future possibilities and an achieved, stable reform”, according to the text.

Investments and changes in the training of health professionals

In each of the suggested reforms, the WHO emphasizes the importance given to human resources and supports the need to rethink and revise the current teaching approaches. “The science of equity in health and primary care still do not occupy the central place that they should in schools of public health. The training of health professionals is beginning to incorporate into its study programs common materials that emphasize

problem-solving within the framework of multidisciplinary teams, but they must go beyond the preparation of skills and attitudes required by the APS, creating practical learning opportunities in all sectors through tutoring, individualized instruction and continuing education”, the article mentions, stressing that such changes depend on a large effort to mobilize the agents responsible for training both in countries as well as among them.

Although the health professional is essential to the APS reforms, the report recognizes that for these workers to be able to learn, adapt and work in teams, with a focus centered on the patient and combining biomedical and social perspectives as well sensitivity to respect for equality, considerable investments are needed. “If there were no investments in this area, the health worker could present an enormous force of resistance to change, rooted in historic models which are more comfortable, tranquilizing, profitable and intellectually undemanding”.

Finally, the article draws attention to the importance of increasing the awareness of professionals – “If the professionals know that the AP work can be stimulating and gratifying, in addition to socially and economically rewarding, they may not only join the cause, but also become passionate activists for it” – and for the value of experiential exchange among countries: “Also in that case, taking advantage of the opportunities that the exchange of common experiences offered by a globalized world may serve to accelerate the necessary transformations”. 🗨️