TECHNICAL REPORT

International Meeting

INNOVATION IN UNDERGRADUATE AND POSTGRADUATE MEDICAL EDUCATION ON MENTAL HEALTH

UAM UNIVERSIDAD AUTONOMA DE MADRID

Organización Panamericana de la Salud

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UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO

Technical report

INNOVATION IN UNDERGRADUATE AND POSTGRADUATE MEDICAL EDUCATION ON MENTAL HEALTH

Banco Santander Chair UAM/UNAM Psychiatry and Health

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Medical School. Universidad Autónoma de Madrid (Spain).

Index

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Likewise, to the mental health representatives of the participating countries, without whom this report would not have been possible.

Abbreviations

APS: Primary Healthcare
CAPS: Psychosocial Care Centers (Nicaragua)
CEPAL: Economic Commission for Latin America and the Caribbean
CSS: Social Security Fund (Panama)
IAR: Rotating Annual Internship (Argentina)
mhGAP: Mental Health Gap Action Program
PAHO: Pan American Health Organization
UAM: Universidad Autónoma de Madrid (España)
UBA: Universidad de Buenos Aires (Argentina)
UFRJ: Universidad Federal de Rio de Janeiro (Brasil)
UNAM: Universidad Nacional Autónoma de México
UNAN: Universidad Nacional Autónoma de Nicaragua
WHO: World Health Organization

Introduction

The present report is centered on the innovation of mental health education in graduate and postgraduate studies, based on the international meeting that took place in Madrid on 7-8 December of 2016 (Annex I), and sponsored by the Banco Santander UAM/UNAM Psychiatry and Health Chair, with the cooperation of the Pan American Health Organization/World Health Organization (PAHO/WHO). Mental health representatives of ten Latin-American and European countries participated in the meeting (Annex II). Furthermore, an ad hoc survey was developed (Annex III), with the goal of homogenizing the collection of information, which was disseminated after the meeting to the eight Latin-American countries that were present, and to the other two invited countries that could not send their representatives (Brazil and Cuba). In this report, information on all of these countries is collected.

Opening ceremony:

Representatives from the WHO (UAM) Collaborating Center, UAM, UNAM, Banco Santander (Universities) and PAHO

José Luis Ayuso Mateos (WHO-UAM collaborating center) welcomes and thanks everyone for their attendance. He stated that the Banco Santander UAM/UNAM Psychiatry and Health Chair sponsored this meeting, with the idea of discussing and contemplating based on the experience of the cooperation between the Universidad Autónoma de Madrid (UAM), and the Universidad Nacional Autónoma de México (UNAM), which the Banco Santander financed. He details that the chair has been working to strengthen the role of Spanish-speaking investigators, as well as supply and incorporate issues relevant to mental health. He would like to thank Dévora Kestel (PAHO) for the support of the organization at the meeting.

Amaya Mendikoetxea (Vice President for International Relations of the UAM) congratulates the organizers for their initiative, and trusts that these activities will form the basis for future collaborations with the UNAM and other Latinamerican universities, and thus expand the Iberoamerican space of knowledge. She would like to thank the Banco Santanders for the support they have provided.

Paloma Mora Villarrubia, (Representative of Santander Universities), would like to thank everyone for Banco Santander being a participant in these projects. She comments that the nine years that they have been supporting this collaboration have been very fruitful. She brings up that Banco Santander has agreements with 1,225 universities, and is present in 21 countries with over 28,000 projects and 70 sponsored chairs.

Silvia Ortiz, (Director of the Department of Psychiatry and Mental Health of the Faculty of Medicine of UNAM) notes that the most relevant thing worked on within the framework of the collaboration was mental health education for non-specialist doctors. This education also involves research projects, and a follow-up is currently in progress to see the impact of these programs.

Dévora Kestel, (Unit Chief for Mental Health and Substance Use at the Pan American Health Organization) notes that PAHO has been working on this education program (mhGAP) for some years so that primary care professionals could identify and treat the most common mental disorders. In the American Region, there is a lack of specialized mental health professionals and, furthermore, the few that exist are mostly in the major urban areas, which is an obstacle in reducing the mental health gap. Most countries in the region consider mental health to be a priority, although this interest does not always correspond to the distribution of resources.

Summary of the presentations

A) mhGAP: Global action plan to overcome mental health gaps

1. Action plan to overcome mental health gaps (mhGAP) (Presented by José Luis Ayuso-Mateos)

We have evidence that mental disorders are very common and carry with them a great disease burden due to the disability they engender. By 2010, major depressive disorder will be the second cause of disease burden on a global level. In developed countries, between 78% and 85% of major mental disorders did not receive treatment during the last 12 months. These data reflect the great gap between the needs of the population and the care received.

The WHO launched the Mental Health Gap Action Program (mhGAP) in 2008 (1). On one hand, it identified the gap between available health resources and the mental health needs of the population, but it also highlighted the solid evidence that there was over the effectiveness of different available management strategies for mental health problems, through a rigorous and effective analysis of the state of affairs and the participation of international experts. All of it was reflected in the first version of the mhGAP implementation manual, which was published in 2010 (1). In this guide, the interventions for treating mental, neurological and substance use disorders that could be implemented on a non-specialized healthcare level are exposed, in a format of great practical use

There are several advantages to the approach proposed by the mhGAP clinical guide, which include:

a) It integrates mental health within the health services the country already had.
b) The results and impact of the program are measurable.
c) The resources and the context in which the program will be implemented are evaluated in order to adapt it to the reality of the country.
d) The modules can be implemented in all age ranges.
e) The guide includes both pharmacological and non-pharmacological interventions.

To date, more than 90 countries have implemented this program worldwide. The mhGAP program proposed reviewing the scientific evidence every 5 years, so in 2016 version 2.0 of the mhGAP implementation guide was launched (2), which incorporated the recommendations of many experts from all over the world who had used the previous guide, and the new evidence

generated from the implementation of version 1.0. This second version incorporates two new models: consultation and essential care, and the mhGAP implementation module. Most changes to this new version try to improve their practical use. The mobile app is expected to launch throughout 2017, and it will allow the incorporation of the particularities of each country in its electronic version.

The translation process into Spanish of mhGAP version 2.0 is in progress and the translated version will be available in 2017 (2). http://iris.paho.org/xmlui/bitstream/handle/123456789/34071/978927531957-spa.pdf?sequence=5&isAllowed=y

2. mhGAP implementation in the Americas region (Presented by Dévora Kestel)

The implementation in the Americas Region began when Panama was chosen as one of the six countries for the mhGAP pilot project on a global level in 2010, under the supervision of the WHO. It was the only country in the Americas Region that participated in this pilot project. The other five countries were Sierra Leona, Nigeria, Ethiopia, Jordan and the Solomon Islands. Panama translated the version into Spanish in order to adapt it to the context of the country, and it chose two modules for this project: the depression and epilepsy modules. Based on the experience in Panama, the program was extended to other countries in the Americas. Currently, more than 20 countries in the Americas are using the mhGAP to train their professionals.

In most countries, the health ministries finance these programs, although in many cases they also count on the financial and technical backing of PAHO. The countries have developed training of trainers, in all modules. In the first few courses for non-specialized healthcare-level personnel, the countries chose some priority modules. The professional profile of the trainers in the education process for mhGAP use was of general practitioners and nurses with experience with mental disorders, specialist physicians, and psychologists.

The Americas have also developed online training experiences, using the PAHO Virtual Campus platform. For example, an online version was created for English-speaking Caribbean countries in 2013, which allowed the completion of a five-month course. The course has tutors that regularly follow up on participants, who connect regularly once a week. There was an in-person meeting in one of the courses. In 2015, the same online course was launched again, but this time in Spanish and in 14 countries. The course, being 5 months long, allows students to address cases of real patients, and become familiar with the content more gradually.

The evaluation of the mhGAP program by trained professionals is very positive, and the surveys show that trained professionals consistently consider it very useful for their job. An impact analysis of this training was carried out (both the in-person ones and the virtual ones through the Virtual Campus). Many reports resulted from this, both on the pre- and post-course knowledge tests, as well as on surveys carried out to explore the impact the training had on participants. (3, 4, 5, 6). One detail identified as relevant, regarding the improvement of the mhGAP program, Is the support and supervision of professionals after training.

Obstacles have also been detected that could diminish the effectiveness of the program. The most important ones are in the process of adapting the guide to the context of the country. A fundamental aspect that we need to take into account is that many modules of the guide recommend drugs from the WHO Model List of Essential Medicines, and the countries do not always have these medicines available to the population at the primary healthcare level. Another detected problem is the health registration. Yet another detected problem is the information system. In many countries, the primary healthcare registry system does not include mental health, meaning that professionals do not have the possibility of registering the cases of people with mental disorders who were treated. One recommendation is that there should be a more extensive change on a health policy level, if there is a decision to register mental health on the first healthcare level.

There were also comments that it was necessary to improve psychosocial intervention training in the future. At present, there are four new available tools for different types of psychosocial interventions in the mhGAP guide. Furthermore, from an educational standpoint, creating new videos adapted to different cultures is considered necessary, so that they can be used in courses during mhGAP training. There is a proposal to create role-playing games with avatars for teaching professionals, although whether or not it would have the same impact as real actors needs to be determined. In general, videos represent a big contribution from a pedagogical perspective, since they help people understand how to conduct interviews for subjects relevant to physicians.

Finally, there have been proposals to incorporate training in the mhGAP guide into different medical training programs and courses. Among the identified proposals, some stand out: during the internship year, during social service, incorporate it into postgraduate final project, in the foreign exchange program, after finishing the degree but before the internship, within the syllabus of mental disorders during the graduate studies, etc.

3. The case of Mexico: formative experiences with the mhGAP (Presented by Silvia Ortiz León and Pilar López)

In 2007, the collaboration began between the UAM and UNAM. Within this collaboration project, the implementation process for the mhGAP guide began. During the mhGAP training in Mexico, the course included an online and an on-site section. Furthermore, there were tutorials and feedback given to all participants. The results of the training were presented in Guadalajara, Mexico and a major gap was observed between the lack of training for handling mental disorders by doctors and the large amount of cases they receive. On the other hand, the participants commented that the course provided them with more confidence for treating these diseases, and more knowledge on psychosocial approaches. It was also observed that participants were very satisfied with the course, and they started promoting among their peers themselves. The relevance of recording the evaluation of training impact was highlighted.

In Mexico, other institutions in different states have also developed courses, occasionally in collaboration with PAHO, such as those in the south-southeastern region, those in the states of Chihuahua, Sonora or Jalisco. It is noteworthy that there is a serious

gap in mental health in Mexico, since the country only dedicates 2% of its health budget to mental health[1].

In order to continue the project, the UNAM proposes giving a course in the curricular plan of the social service. Although doctors cannot prescribe medications during this period, the intention is that once they obtain their degree they will have been trained to implement the approaches proposed by the guide.

B) Analysis of the situations in the countries

1. Situation in Argentina (Presented by Juan Carlos Stagnaro)

Healthcare in the country is divided into public health (37.60%), social work (services mainly for trade union members, 51.2%), and the private health sector (10.88%). First-level doctors assisted by specialists and multidisciplinary teams attend to mental health.

The country has 5000 psychiatrists, who are not homogenously distributed throughout the territory; they are less prevalent in rural areas and small urban populations. About 150 psychiatrists are educated each year.

Postgraduate psychiatry education

The postgraduate period in psychiatry lasts 3 years. During this time, they are trained by doing part-time residency[2] at a hospital (completely free charity hospitals), and taking courses. Residency is centered on the hospitals, predominantly with a biomedical model.

There is a proposal for the cases managed by doctors in training to have regulated supervision under psychiatric doctors. However, there are difficulties, since professionals are not very available. In this respect, one should remember the fact that many physicians and professors that provide services to these educational programs are unpaid.

The aspects that need improvement are:

- The heterogeneity of criteria and the class load curriculum in different residencies, according to regions and institutional references (national, provincial).
- In many cases, excessive care load, at the expense of educational activities.
- Good teaching level in the educational systems, but they lack stability and have low pay.

[1] IEMS-WHO report on Mexico's mental health system (2011) http://www.who.int/mental_health/who_aims_country_reports/who_aims_report_mexico_es.pdf?ua=1

[2] "They correspond to a non-rented time system for postgraduate professional training, part-time developed under programming and supervision conditions, with the goal of educating trained professionals for the good of the community, both inside and outside of hospitals". They are carried out in the Autonomous City of Buenos Aires.

Another entry point for specialized training is through university courses specialized in psychiatry, which last 3 years, during which students must certify that they regularly attend a specialized service. There are degrees specialized in psychiatry in the medical schools of Buenos Aires, Cordoba, Rosario and Comahue. They are also done in some non-state institutions. There are approximately 80 vacancies offered for obtaining training this way per year.

Aside from the 5000 existing psychiatrists In Argentina, there are 35 000 clinical psychologists. After finishing their graduate studies, they can attend to patients directly, without requiring a postgraduate program. It is believed that there is a surplus of clinical psychologists, but as is the case with psychiatrists, there is a territorial distribution problem.

Undergraduate medicine training

In Argentina, there are 28 medical schools (16 public and 12 private). The public ones have 85% of medicine students, and the private ones have the remaining 15%. There is a large number of unpaid teachers. There is a prevailing bias for psychoanalytical orientation.

During graduate studies, students are in a biomedical cycle, in which they do practical work in schools, retirement homes, etc. all of this is basically done to observe "normal and common" behavior. In this cycle, there is an annual mental health subject, with 4 hours a week.

Afterwards, they do a clinical cycle where they carry out clinical practical work and they observe pathological behavior (100 hours). After this, they do an annual revolving internship where they are trained in mental health (32 hours), and other fields of medicine.

Following this, the structure and general contents of Medicine Studies at the Medical School of the UBA serves as an example:

- Biomedical cycle: it lasts two-and-a-half years, and its objective is to understand the structure and function of a healthy individual on a biological, psychological and social level; through disciplines such as anatomy, histology, cellular biology, embryology, mental health (128 hours), and family medicine.
- Clinical cycle: it lasts two-and-a-half years, and its main objective is that the student be able to prevent; diagnose; and formulate prevention, treatment and rehabilitation systems for several pathologies. To this end, it tackles the study of the five fundamentals of medicine and their specialties: clinical medicine, pediatrics, obstetrics/gynecology, surgery and psychiatry (100 hours). Furthermore, public health, bioethics, and legal medicine.
- Instead of Rotating annual internship: Annual internship with rotations the course lasts 1 year; students take it before the residency and it includes clinical medicine, surgery, obstetrics/gynecology, pediatrics, and mental health modules (32 hours).

The following aspects of graduate mental health training need to be improved:

- Biologistic bias in medical teaching.
- Prevailing bias for psychoanalytical orientation when conceiving the subject.

- Varied content of the criteria and the curricular content workload in mental health and psychiatry at the medical school.
- Good teaching level, even though there is a lack of pay for teachers (many ad honorem).

2. Situation in Brazil (Presented by Maria Tavares Cavalcanti[3])

Mental healthcare in Brazil is mostly public. There are 9000 psychiatrists. They are not homogeneously distributed, and there is a notable lack of professionals in the North, Central-West, and Northeast of the country. 300 specialists in psychiatry are educated annually. In general, their education happens in a hospital environment with a predominantly biomedical model.

There are 280 medical schools in the country. Since 2014, national medical curricular directives make mental health mandatory, within the rotating annual internship done at the end of the studies. If we look at the experience at the Federal University of Rio de Janeiro, we can observe that there are three mental health subjects: medical psychology, psychiatry, and mental health, to which must be added the instead of rotating internship: internship with rotations with 396 hours of practice.

3. Situation in Cuba (Presented by Annia Duany Navarro[4])

Healthcare in Cuba is public. There is mental healthcare on the first level of healthcare. There are 1195 psychiatrists (961 general psychiatrists and 234 child and adolescent psychiatrists). Their territorial distribution is uniform. There are 259 psychiatry residents per year (180 in general psychiatry and 79 in child and adolescent psychiatry). There are 13 medical science universities and 25 medical science faculties.

Mental health teaching is homogenously regulated on a national level, with 9 mental health subjects and a total of 75 theoretical hours and 265 practical hours. There is also national regulation for primary healthcare teaching, with a total of 56 hours of mental health practice. There are other mental health practical specialties, such as pediatrics and geriatrics, with 140 total practical hours. Likewise, nursing also has mental health education, with two specific subjects on the topic.

4. Situation in Chile (Presented by Rafael E. Sepúlveda)

Nowadays, healthcare is 80% public and 20% private insurance. The latter does not provide mental healthcare, as such, it has to be associated to public health. Every Chilean has guaranteed access, in a specific timeframe, to medication, medical examinations, and treatment for very common diseases (depression among them).

[3] Professor María Tavares Cavalcanti could not attend the meeting, but she sent her presentation and filled out the country survey.
[4] Professor Annia Duany Navarro could not attend the meeting, but she filled out the country survey.

Undergraduate education

There is currently a generalization of medical schools. In the undergraduate period, there is no control over what each university teaches. Education is sometimes very basic, and the most common teaching method is lectures.

In some centers, they are developing courses with a public health sensibility and coherent community health content. There is an undergraduate mhGAP implementation, but it is harder in private universities.

Postgraduate education

There are 1568 psychiatrists (1249 adult psychiatrists and 319 child and adolescent psychiatrists). Distribution is not homogenous, and they are notably lacking in regions with low population density and less private practice opportunities. This especially affects the territorial distribution of child and adolescent psychiatrists.

There are 103 resident psychiatrists per year (78 in adult psychiatry and 25 in child and adolescent psychiatry). After their residence, they have to practice in the public system full-time for six years, with low salaries.

In the postgraduate period, the mhGAP program guide was introduced to refresh and complete community mental health topics that were not adressed in the undergraduate period; mainly developmental disorders, suicide and dementia modules. The system positions specialists and primary healthcare doctors on the same care level. The entire team of professionals, not just the specialist, usually treats mental health problems.

There are consulting mental health services in family health centers. They are delivered once a month, always with the same consultant (who is normally of the second level). In this sense, continuity in care is valued.

5. Situation in Guatemala (Presented by Edgar Vásquez Trujillo)

Healthcare is mainly public. There are 108 psychiatrists in Guatemala, of whom 90% are in Guatemala City. In recent years, about 10 psychiatrists graduate annually. There are 800 undergraduate students and 40 postgraduate students.

Undergraduate education

Five universities teach medicine. In the Universidad de San Juan Carlos de Guatemala (public), in the degree of medicine, they teach courses on psychology, mental health, and psychiatry. They afterwards have a rotation in general hospitals. The Rafael Landívar University (private Jesuit) has mental health I and II courses, and a one-month rotation at a psychiatric hospital. At the Francisco Marroquín University (private), they have undergraduate human behavior courses and a one-week rotation of psychiatric hospital service. At the Mesoamerican University (private), they have undergraduate medical psychology I and II, and psychiatry I and

II courses. At the Mariano Gálvez University (private), they have subjects on the biological basis of behavior, psychology and abnormality, child and adolescent psychological development, mental health in primary care, and psychiatry. Furthermore, there is a psychiatry rotation that lasts one month.

One proposal is to integrate the mhGAP guide training into the curriculum of private universities. This would especially be possible if institutions like PAHO support it.

Another proposal is to incorporate training during rotation at the psychiatric hospital. However, time is limited since they only have 1 month available.

Postgraduate education

The San Carlos de Guatemala University has a master's degree in science, with a specialization in psychiatry, which incorporates a community psychiatry rotation in the second year, and in the fourth year, it has supervised professional activity in provincial hospitals. Until now, they did interconsultation work, but starting this year, the intention is that consultations will not just be external, but will incorporate community mental healthcare. Since 2006, there has been a rotation in a six-week community psychiatry system. This system is not part of the Ministry's network; it depends on a non-government organization. It is notable that trained professionals in this framework could eventually become trainers in education programs for managing mental disorders in the context of non-specialized healthcare.

6. Situation in Panama (Presented by Miguel Á. Cedeño Tello)

Healthcare is mostly public, from the Ministry of Health and the Social Security Fund. There are 141 psychiatrists in the entire country (118 general psychiatrists, of whom 97 work in public care and 23 are paidopsychiatrists, 16 of whom work in public care). Territorial distribution is not homogenous, the indigenous regions being the most affected by the lack of mental health professionals, since they have no psychiatrists. The country's capital has 58% of public sector psychiatrists.

Undergraduate education

There is currently one private university (1217 students) and five public ones (Universidad Latina with 800 students, Universidad de Columbus with 259, Universidad Autónoma de Chiriquí with 342, Universidad Americana with 268, and Universidad Interamericana with 360).

In 1960, the Public University incorporated psychiatry into the academic field, without any formal program. In 1971, they managed to continue psychiatric education, but with a pre-established program. Medicine at the Public University has 12 semesters: two basic semesters, four preclinical and six clinical. They have the following mental health subjects: applied psychology, medical psychology, psychopathology, and clinical psychology. This last one has eight weeks of rotation, for a month they have first level rotations (two weeks in primary care), second level (one week), and third level in the psychiatric hospital (one week). In general, classes taught in the academic area are mostly lectures.

Postgraduate education

In 1976, subspecialties in the field of psychiatry were recognized. In 2003, master's degrees and doctorates began to be taught. In 2011, a unique residence plan was developed, which extends four years and is backed by the university. Residents can rotate in private and public hospitals. In the last few months of their residence, they rotate in a foreign country.

There are currently postgraduate students in different Panamanian institutions, such as the Ministry of Health's National Institute for Mental Health (8 residents), CSS Hospital Complex (10 residents), Santo Tomás Hospital (public, 11 residents), CSS Manuel Ferrer Policlinic (one paidopsychiatry resident).

Community psychiatry is only given as an alternative to external rotation. There is a proposal to integrate mhGAP guide training into the final post-graduate project.

7. Situation in Peru (Presented by Silvana Sarabia Arce)

There are 834 psychiatrists in the country. There is not a homogenous territorial distribution and most of them work in the capital (Lima).

Undergraduate training

The degree in medicine lasts seven years. There are 23 public universities and 35 private ones that offer a degree in medicine. Students have a clinical practice, which is where they conduct interviews with patients. In recent years, they graduate 2729 doctors a year on average. During the seven years of medicine, they have some subjects on psychiatry. For example, in the third year there is a week where they teach medical-psychological aspects. In the fourth year, there is practical work in clinical introduction, where they examine the general chart and clinical history, which includes a chart of the mental examination. In the fifth year and the internship, there is a month where they visit patients with psychiatric disorders. Afterwards, they do a year outside the university, where students go to rural or marginalized populations (external).

Postgraduate education

Each year, 75 psychiatrists are educated. 10% of internship positions are for psychiatry.

In the residence, there are two types of doctors: contractually obligated doctors, who were previously working at the residence and have to return to their original workplace when they finish their residence; the other group are free doctors who do not have the duty to return. In both cases, the State pays the salary. In 2016, there were 15 contractually obligated doctors, and 61 free doctors at the residence.

There is no a competence-based plan for postgraduates, but instead is an hour-based one. Recently, Supreme Decree Nº 033-2015-SA came out, and article 27 forces all specialists

to take a mental health course with a community focus during their last year of residence, with a duration of three credits.

8. Situation in Nicaragua (Presented byAndrés Herrera Rodriguez)

The public health sector covers 70%. There is a psychiatrist in the Managua General Public Hospital, which attends to a population of 200 000 inhabitants. Mental health human resources do not even reach 1% of general health resources. People with a mental problem are treated in general hospitals and not in psychiatric ones, with the goal of not separating the patient from their family environment. However, most services are concentrated in Managua, whereas other geographic areas have access problems.

The mental health education system dates back to 1980, and the community mental health model is similar to Cuba's.

One big problem that Nicaragua is facing is the increase in the addiction mortality rate. The country has gone from a drug producer to a drug consumer. This mortality (also caused by alcohol) could be addressed and avoided by appropriate interventions.

There is currently a high number of private universities. However, the present analysis centers on public university.

Undergraduate education

The Universidad Autónoma Nacional de Nicaragua (UNAN) educates about 80-90 students in psychology. The public health system incorporates a reduced number of nurses, psychologists, and social workers. The UNAN has 216 medical students. In the third year, for six weeks (20 hours a week), they rotate through hospitals associated with UNAN, visiting units such as early detection and poison treatment.

Postgraduate education

Each year, one or two new psychiatrists trained educated. Psychiatry students rotate through the psychiatric hospital, two in the psychosocial care center, and two in health centers. They are implementing a suicide and mental health training project for students and teachers.

In the educational field, they have modified mental health academic approaches to mental health and addictions. They teach a master's degree in science, with a mention in mental health and addictions, which students from different parts of Nicaragua, police officers, and mayors attend. It is a collaboration between the Ministry of Health, non-government organizations, and the University.

The UNAN collaborates with Canada in a project intended to promote wellbeing amongst young people and early treatment for mental disorders. Thanks to this project, new models have been incorporated into the students' curriculum.

9. Situation in the Dominican Republic (Presented by Fernando Sánchez Martinez)

Healthcare is mostly public. There are 200 psychiatrists in the country, 132 of whom work in the public sector. Territorial distribution is not homogenous, and the most important shortages are in the Haiti border region.

Undergraduate training

In 1937, a psychiatry subject was included in the university reform. In 1939, the first three psychiatrists arrived in the Dominican Republic, all of Spanish origin. In 1950, psychiatrists educated in Europe and in the United States arrived. In 1958, for the first time, psychiatrists taught psychiatric education.

In 1965, the year of the civil war, the United States took over the country, with the exception of the public university, taken by progressive republicans. The medical school had its name changed to Escuela de Ciencias de la Salud (Health Sciences School).

The country has 40 private universities, and a public one in Santo Domingo. There are a total of 10 medical schools (one public). With the objective of regulating these education Institutions, the government created the Consejo Nacional de Educación Superior (CONES, National Council of Higher Education), which then became the Secretaría de Estado de Educación Superior, Ciencia, Tecnología (State Secretariat of Higher Education, Science and Technology, SESCYT), which is now a ministry (MESCYT).

The existing model of the Universidad Autónoma de Santo Domingo (state university), is a traditional one based on the students' oral exposition, and practical work developed exclusively at the psychiatric hospital.

To summarize, psychiatric education for undergraduates is taught with specialized criteria, it does not involve any community activity, it is not associated with the general hospital, it does not respond to the population's mental health problems, and it is not associated with the Ministry of Public Health's mental health management program.

The psychiatric hospital was recently transformed into a psychosocial rehabilitation center. Only one psychiatrist works in this renovated institution.

Postgraduate education

In 1977, the postgraduate program in psychiatry begun, with a three-year duration (one year in internal medicine, and two more in psychiatry). Students do their three years in general hospitals and in the psychiatric hospital. Likewise, they have theoretical classes. Hospitals have some limitations, such as lack of budget, administrative limitations, and lack of human resources. Hospitals depend greatly on the work of residents, which implies a great deal of clinical burden. On a national level, seven psychiatrists are educated trained per year.

Students currently do their psychiatry residence in general hospitals. During their residency, doctors receive payment for their services. When they complete their residence, they are given a local certification. They need to pass a comprehensive exam to obtain a general certification.

It should be noted that in 2006 two events that will greatly impact on psychiatric teaching at a postgraduate level took place:

- The headquarters of the residence program were transferred to a general hospital.
- The psychiatric hospital was closed. The mental health unit of the general hospital and primary care centers offer mental healthcare.

2016 survey summary

Table 1 summarizes the number of psychiatrists and residents graduating annually per country, and it includes the rate per 100 000 inhabitants, in order to have a more detailed value. Regarding the classification by each country's income according to the World Bank, two countries are in the lower-middle income group (Guatemala and Nicaragua), one (Chile) in the high-income group, and the rest are in the upper-middle income group.

Table 1: Number of psychiatrists at national level and number of number of residents in psychiatry that completed their training in the last year (Survey 2016). The population was obtained from CEPAL projections
(http://www.cepal.org/es/temas/proyecciones-demograficas/estimaciones-proyecciones-poblacion-total-urbana-rural-economicamente-activa)

COUNTRY	POPULATION	PSICHIATRIST		Psychiatry Residents
		Number	Rates per 100.000 inhabitants.	
ARGENTINA	43.712.443	5.000	11,43	150
BRAZIL	209.486.085	9.010	4,3	300
CUBA	11.425.002	1.195 (961 general psychiatrists + 234 child and adolescent psychiatrists)	10,45	259 (180 general psychiatrists + 79 child and adolescent psychiatrists)
CHILE	18.064.511	1.568 (1.249 general psychiatrists + 319 child and adolescent psychiatrists)	8,68	103 (78 general psychiatrists + 25 child and adolescent psychiatrists)
GUATEMALA	16.229.896	108	0,66	10
MEXICO	126.247.996	4.393	3,47	150
NICARAGUA	6.152.298	90	1,46	1
PANAMA	3.991.286	141	3,53	8
PERU	31.776.264	834	2,62	75
DOMINICAN REPUBLIC	10.652.135	200	1,87	7

Table 2 presents the summary of existing national regulations, according to mental health education in the undergraduate period, in primary care, in other medical specialties, and in other health professional groups. Only Cuba has national regulations in all four groups.

Table 2: National regulations on mental health training in different training groups (Survey 2016)

COUNTRY	Undergraduate national regulations	Primary care national regulations	National regulations in other medical specialties	National regulations in other healthcare professionals
ARGENTINA	NO	NO	NO	NO
BRAZIL	YES	NO	NO	NO
CUBA	YES	YES	YES (Paediatrics and Geriatrics)	YES (Nursing, Social Work and Occupational Therapy y and Clinical Psychology)
CHILE	YES (In the form of mandatory national exam for all the graduates)	NO	NO	NO
GUATEMALA	NO	NO	NO	NO
MEXICO	NO	NO	NO	NO
NICARAGUA	NO	YES	YES	YES (Nursing)
PERU	NO	NO	YES (Supreme Decree 033-2015-SA. Art. 27 27)	NO
DOMINICAN REPUBLIC	NO	NO	NO	YES (Nursing)

Discussion

All participants in the meeting participated in the discussion on improvement possibilities for the mental health education programs, and the possibility of using mhGAP for them. The debate was structured around identifying barriers and opportunities in the different levels of medical education. We now present a summary of the topics that were raised in a summary manner.

A) Identifying barriers for improving education programs

Undergraduate education barriers

- There is a policy barrier: mental health is not viewed as a priority public health problem. In some countries, they have even proposed making mental health an optional course in their educational program. Furthermore, in many countries, mental health university educational programs are not aligned with the mental health policies of their respective Ministries of Health.

- The bio-medical model that prevails in undergraduate education has a reductionist view, and it makes the relationship between mental health and other disciplines more difficult. This is related to the lack of public health vision from teachers. This topic is also related to the lack of assistance contexts of a comprehensive l healthcare model. There is no collaborative work done with teachers of other subjects, in order to see patients in a more comprehensive way. For this reason, we advocate a change in this paradigm; moreover, mental health needs to be taught in a way that is useful for primary care. This would involve teachers teaching differently to how they were taught by their own teachers back when they were still learning.

- It is also notable that there is an important growth of universities, especially private ones, and at the same time, there is great heterogeneity between the mental health education programs. There are even universities that are not focused on teaching general physicians, but specialists, which distances them from the goal of promoting primary healthcare.

- Furthermore, one obstacle to promoting innovative changes in curriculums is bureaucracy, since when the time comes to change education programs, they become a barrier that is hard to break through.

- The education programs address pharmaceutical interventions well, but the same cannot be said about interventions based on psychotherapy and psychoeducation.

- The most important barriers for implementing a program like mhGAP for NON-specialized care is both in the corporate field and scientific societies. These scientific societies frequently make clinical guides that are not in line with mhGAP. Likewise, psychiatric commissions that write the undergraduate exams are composed of

psychiatry specialists who are not centered on community care, nor on a vision of the role that primary care must play to reduce the mental health gap.

Postgraduate education barriers for psychiatry specialists

- In several countries, many psychiatrists do not share the mhGAP perspective, which proposes a way of handling mental health in primary, family, and community care. This situation is more established in countries where institutional and hospital-type psychiatry prevails. One obstacle to progress in the mhGAP program is that educating new psychiatrists usually happens in hospital environments without a community mental health vision.

- In most cases, the territorial distribution of psychiatrists is concentrated in major urban centers, which in turn leads to new psychiatrists also being educated in these major urban areas, perpetuating a vicious circle that increases the mental healthcare gap in rural areas.

- Psychiatrists in some places consider the mhGAP guide to be insufficient for them, without taking into account that the mhGAP guide is aimed at the non-specialized healthcare level, but psychiatrists need to know it since they could be the teachers and supervisors of this program. This program demands a collaboration between the non-specialized Healthcare and the specialized level; and requires that psychiatry experts know it, so that they can participate as teachers and supervisors, for its correct implementation.

Postgraduate education barriers in other specialties, such as gynecology and pediatrics

- A key barrier to implementing the mhGAP guide in other specialties is the prejudice and stigma regarding these topics, closely related to the deficiencies in mental health education for undergraduates and other specialties.

- There are many barriers in the field of healthcare practice, such as: the lack of multidisciplinary teams, administrative problems for implementing the guide, and even the difficulty in supervising professionals that do the course.

Postgraduate education barriers in primary care or family medicine

- There are structural barriers, such as primary care doctors' limited capacity for prescribing psychotropics. In some countries, general practitioners need a special authorization in order to prescribe drugs for mental illnesses, or the medications recommended by the guide are not accessible, especially in clinics in rural areas.

- Lack of economic resources for continued supervision and implementation of the guide.

- Lack of unified criteria in the different provinces or regions of some countries make implementing the mhGAP guide difficult.

- Postgraduate education on primary care with the mhGAP guide should also include other professionals, such as nursing personnel and social workers, for its correct implementation.

B) Identifying opportunities

Undergraduate opportunities

- Many countries see the possibility of including the mhGAP guide in the undergraduate education programs in some university years and/or also in the internship programs, or even in the rural, social, or community rotation services.

- Other degrees can also implement the guide, such as psychology, nursing, or social work, i.e., professions that are part of multidisciplinary healthcare teams.

- The role that PAHO can play in the dissemination of the mhGAP guide is key, to both ministry and academic representatives from the different universities and scientific societies. It is essential for explaining the successful experiences in different countries since 2010, as well as the WHO's commitment on a global level to a novel and efficient program that can reduce the mental health gap by 75%.

- The guide has the advantage of being easy to replicate, and can be adapted to any socio-economic context. This adaptation process to the country's context is key for its future implementation, since it is therefore one to know structural obstacles in advance and even find solutions to deal with them.

- The guide also carries some general principles of care and communication that work as transversal competences that any health professional should have, such as empathy, listening and communication, among others.

- The mobile app will make the guide much more accessible.

Postgraduate opportunities

- The WHO and PAHO has presented the mhGAP program as the priority line of action for reducing the mental health gap since 2008. Today, we have an important experience in many countries that has made it easier to adapt it better to many contexts, and even improved the format of the new 2.0 version. PAHO gives technical and sometimes financial support for education with the guide, through lectures as well as the Virtual Campus platform. The formative experience at the Virtual Campus has made its efficient dissemination easier.

- Postgraduate education can be regulated within the undergraduate phase in family medicine or rotation in community mental health, as well as within continuous training programs. Furthermore, the guide can be used in its entirety or in part, since it is presented in a modular manner and it is easily adapted to any context.

Bibliography

(1) World Health Organization. mhGAP Intervention Guide. Guatemala. 2012

(2) World Health Organization. mhGAP Intervention Guide - Version 2.0. 2016 for mental, neurological and substance use disorders in non-specialized health settings.

(3) Pan American Health Organization. MhGAP in the Americas. Pruebas anteriores y posteriores a la capacitación (datos disponibles hasta junio 2013). Washington, DC: PAHO; 2014.

(4) Pan American Health Organization, Panama Ministry of Health. Data result analysis of "Pilot test to evaluate strategies for increasing the mhGAP program capacity of development disorders in Panama". Panama; 2014.

(5) Pan American Health Organization, Panama Ministry of Health. Report on the mhGAP program implementation experience in Panama. Panama; 2016.

(6) Pan American Health Organization. Global action plan implementation for overcoming gaps in mhGAP mental health in the Americas Region. Washington, D.C.: PAHO, 2016.

ANNEXES

ANNEX I: Meeting agenda

AGENDA

Wednesday, December 7

9:30	**Welcome. Greetings of the UAM, UNAM and PAHO authorities** **Introduction of the participants** **Goals of the meeting** • JL Ayuso UAM • Amaya Mendikoetxea UAM • Paloma Mora Villarrubia SANTANDER UNIVERSITIES • S. Ortiz UNAM • D. Kestel PAHO/WHO
10:00	**Introduction to mhGAP** • José Luis Ayuso
10:30-11:00	**Coffee break**
11:30	**Implementation of the mhGAP in the Americas** • D. Kestel
12:30	**Educational experiences with the mhGAP in México** • S. Ortiz y P. López
13:00	**Mental health education in under- and postgraduate Medicine programs in Latin America** • **Situation in Cuba** A. Duany* • **Situation in Guatemala** E. Vásquez • **Situation in Nicaragua** A. Herrera
13:45-14:45	**Lunch break**
14:45	**Mental health education in under- and postgraduate Medicine programs in Latin America** • **Situation in Panamá** MA Cedeño • **Situation in Perú** S Sarabia • **Situation in the Dominican Republic** F. Sánchez Martínez
15:30	**Mental health education in under- and postgraduate Medicine programs in Latin America** • **Situation in Argentina** JC Stagnaro • **Situation in Brazil** M Tavares* • **Situation in Chile** R Sepúlveda
16:15-16:45	**Coffee break**
16:45-17:30	Summary session and end of day

Thursday, December 8

9:30	**Summary of the previous day** • JL Ayuso
10:00	**Discussion in groups: Identifying barriers to advance in the improvement education programs**
11:00-11:30	**Coffee break**
11:30	**Group presentations** Representative of each group
12:30-13:30	**Lunch break**
13:30	**Discussion in groups: Identifying opportunities**
14:30	**Lunch break**
14:45	**Group presentations** Representative of each group
15:30	**Recommendations and roadmap – general framework for the Region and each country assumes a role and a responsibility on a national level**
16:30	**Agreement for developing a final document**
16:45-17:30	**Discussion and Conclusions**

*Could not attend the meeting at the last minute, but completed the country survey.

ANNEX II: List of participants

LIST OF PARTICIPANTS

SPEAKERS

1. **José Luis Ayuso-Mateos**, Chairman and Director of the Department of Psychiatry, Medical School, Universidad Autónoma de Madrid. WHO Collaborating Centre for Mental Health Services Research and Training, Calle del Arzobispo Morcillo, 2, 28029 Madrid, Spain. E-mail: joseluis.ayuso@uam.es

2. **Miguel Á. Cedeño Tello**, Full professor of Psychopathology and Psychiatry, Medical School, University of Panama, Vía Simón Bolívar, Transístmica, Panama City, Panama. E-mail: mangelcete@hotmail.com

3. **Andrés Herrera Rodríguez**, Professor, School of Medical Sciences, Universidad Nacional Autónoma de Nicaragua-León, Edificio Central UNAM-León, Costado Norte Iglesia La Merced, León, Nicaragua. E-mail: andres.herrerarodriguez8@gmail.com

4. **Dévora Kestel**, Head of Mental Health and Substance Use Unit, PAHO, 525 23rd, St NW Washington DC, United States of America.
   E-mail: kesteld@paho.org

5. **Pilar López García,** Professor of the Department of Psychiatry, Medical School, Universidad Autónoma de Madrid, WHO Collaborating Centre for Mental Health Services Research and Training, Calle del Arzobispo Morcillo, 2, 28029 Madrid, Spain.
   E-mail: p.lopez@uam.es

6. **Silvia Ortiz León**, Director of the Department of Psychiatry and Mental Health of the Medical School, Universidad Nacional Autónoma de México, Ciudad Universitaria, Avenida Universidad 3000, 04510, Mexico City, Mexico.
   E-mail: dra_silviaortiz@yahoo.com.mx

7. **Silvana Sarabia Arce,** Associate professor in the Department of Psychiatry and Mental Health, Alberto Hurtado Medical School, Universidad Peruana Cayetano Heredia, Avenida Honorio Delgado, 430, 15102, Lima, Peru. E-mail: silvana.sarabia@upch.pe

8. **Rafael E. Sepúlveda Jar**, Chief of Psychiatric Service, Barros Luco Hospital, Gran Avenida Jose Miguel Carrera, 3204, San Miguel, Santiago de Chile, Chile.
   E-mail: dr.rafaelsepulveda@gmail.com

9. **Fernando Sánchez Martínez**, Ministry of Higher Education consultant. Governing Board of the Academy of Sciences of the Dominican Republic,
   Calle Las Damas, 112, Santo Domingo, Dominican Republic.
   E-mail: fernando.sanchez@claro.net.do

10. **Juan Carlos Stagnaro**, Full Professor, Department of Psychiatry and Mental Health, Medical School, Universidad de Buenos Aires, Calle Paraguay 2155, C1121ABG, Buenos Aires, Argentina. E-mail: jcstagnaro@gmail.com

11. **Edgar Vásquez Trujillo**, Coordinator of the Master's Degree in Sciences with a specialty in Psychiatry, San Carlos University, Ciudad Universitaria, 11 Av, 01012, Guatemala. E-mail: edgarov8@gmail.com

PARTICIPANTS WHO ONLY COLLABORATED IN THE COUNTRY SURVEY

1. **Annia Duany Navarro**, Teaching and Research Department, Hospital Docente Clínico Quirúrgico Dr. Salvador Allende, Calzada del Cerro, 1551,12000, La Habana, Cuba. E-mail: anniaduany@infomed.sld.cu

2. **Maria Tavares Cavalcanti**, Professor, Medical School, Universidad Federal de Río de Janeiro, Avenida Pedro Calmon, 550, Cidade Universitária, 21941-901, Rio de Janeiro, Brazil. E-mail: mariatavarescavalcanti@gmail.com

GUEST OBSERVERS

1. **María Cabello Salmerón**, Department de Psychiatry, Medical School, Universidad Autónoma de Madrid, WHO Collaborating Centre for Mental Health Services Research and Training, Calle del Arzobispo Morcillo, 2, 28029 Madrid, Spain. E-mail: maria.cabello@uam.es

2. **Marta Miret García,** Department de Psychiatry, Medical School, Universidad Autónoma de Madrid, WHO Collaborating Centre for Mental Health Services Research and Training, Calle del Arzobispo Morcillo, 2, 28029 Madrid, Spain. E-mail: marta.miret@uam.es

3. **Geoffrey M. Reed**, Mental Health and Substance Use Unit, World Health Organization, 20, Avenida Appia, CH-1211 Geneva, Switzerland. Email: reedg@who.int; gmreed@mac.com

ACADEMIC SECRETARIAT

1. **Ana Izquierdo Zarzo**, Department of Psychiatry, Medical School, Universidad Autónoma de Madrid, WHO Collaborating Centre for Mental Health Services Research and Training, Calle del Arzobispo Morcillo, 2, 28029 Madrid, Spain. E-mail: ana.izquierdo@uam.es

2. **Laura Rico Uribe**, Department of Psychiatry, Medical School, Universidad Autónoma de Madrid, WHO Collaborating Centre for Mental Health Services Research and Training, Calle del Arzobispo Morcillo, 2, 28029 Madrid, Spain. E-mail: laura.rico@uam.es

ANNEX III: Country survey

QUESTION	ANSWER	
Country [name]		
Is healthcare in your country mostly public or private?		
Is mental health care provided in your country at the primary level?	**YES**	**NO**
If yes, who provides care?	a) Primary care doctors b) Primary care doctors c) assisted by specialists d) Multidisciplinary teams e) Others (explain briefly)	
Number of psychiatrists in the country		
¿Are the psychiatrists homogenously distributed in all the territory according to needs?	**YES**	**NO**
If no, briefly explain where there is a lack of psychiatrists		
Number of psychiatrists educated each year at national level (approximately)		
Number of faculties that teach medicine, both public and private		
Extension and description of the mental health contents of the teaching program in undergraduate medicine		
Are there common rules on a national level that regulate mental health teaching in undergraduate medicine?	**YES**	**NO**
If yes, pleas fill in		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
If no, pleas fill in with an example of Public university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		

	YES	NO
Private university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		

Extension and description of the mental health contents of the teaching program for primary care doctors

Are there common rules on a national level that regulate mental health education in undergraduate medicine?	YES	NO
If yes, pleas fill in		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
If no, pleas fill in with an example of Public university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
Private university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		

Extension and description of the mental health contents of the teaching program for doctors in other specialties

Are there common rules on a national level that regulate the education of doctors in other specialties such as, oncology, pediatrics, o gynecology?	YES	NO
If yes, pleas fill in		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
Are there common rules on a national level that regulate mental health teaching in undergraduate medicine?	**YES**	**NO**
If no, pleas fill in with an example of Public university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
Private university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		

Extension and description of the mental health contents of the teaching program for other healthcare professionals

Are there common rules on a national level that regulate the education of other healthcare professionals, such as nursing?	YES	NO
If yes, pleas fill in		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
If no, pleas fill in with an example of Public university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
Private university		
• In what year(s) or course(s) is it taught?		
• Total number of theoretical hours dedicated to mental health		
• Number of mental health subjects		
• Total number of practical hours dedicated to mental health		
• Places where mental health internships take place		
Other relevant information		

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