State of play analysis workshop

Task 1.1 - FIOCRUZ

Analysis of the present situation of the R&D on health

in the LAC and in the EU

NATIONAL HEALTH RESEARCH SYSTEMS IN LAC

STATE OF PLAY

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March 19th, 2012

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EU-LAC HEALTH is co-funded by the European Community's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 281459.

Analysis of the present situation of the R&D on health in the LAC - **Introduction**

- **General objective task 1.1**

- **Specific objective**
  - Overview of National Health Research Systems (NHRS) of LAC countries.

- **Information** we looked for:
  - governance and health management structures,
  - the existence of policies and legal framework,
  - priorities of research in the area,
  - its main actors and human resources for health research.

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Analysis of the present situation of the R&D on health in the LAC - **Methodology**

- 15 **questionnaires** were distributed by COHRED during the 2nd Latin American Conference on Health Research and Innovation – Panama.
  - 4 countries received digital versions (Colombia, Ecuador, Venezuela and Nicaragua)

- 11 questionnaires were received with descriptions of NHRSs.
  - **Argentina, Brazil, Costa Rica, Guatemala, Mexico, Panama, Paraguay, Peru, the Dominican Republic and Uruguay**
  - **Caribbean** as a whole.

- Information was complemented with **deskwork**

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Analysis of the present situation of the R&D on health in the LAC - **Constraints**

- Most reports had **large gaps** of information. The lack of desired information in the questionnaires or in the official websites sometimes hindered the development of an **in-depth** analysis of certain aspects.

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Analysis of the present situation of the R&D on health in the LAC

General countries data

Country	General countries data													
	Context Indicators			National commitment to health and education		Expenditures and Production of technology and knowledge					Publications of scientific research			
	Human Development (IDH)	Population (millions)	GDP (current in billions of US$)	Public expenditure on health (% GDP)	Public Expenditure on Education (% GDP)	Expenditures on science and technology activities (per capita) US$	Expenditures on experimental R&D (per capita) US$	Patents granted to residents (by millions of individuals)	Royalties and license fees, receipt (by millions of individuals) US$	Researchers in R&D (by millions of individuals)	Scientific publications indexed by LILACS	Scientific publications indexed by MEDLINE (% of all publications indexed in MEDLINE)	Publications in all fiels of science indexed by the SCI [No.]	Scientific publicationjs in the health field indexed by SCI (No) (% of publications in all fields)
	2009	2009	2009	2009	2009 or last available year	2009	2009	2009 or last available year	2009	2007	2009	2009	2008	2008
Argentina	0,788	40,1	307,1	5,1	6	51,5	46,05	6,14 (2008)	2,7	980	1.051	2.456 (0,32)	6.197	3.531 (56,98)
Brazil	0,708	193,3	1.594,5	3,5	5,4 (2008)	130,53	98,84	1,76	2,2	657	15.945	13.335 (1,74)	26.482	17.792 (67,19)
Costa Rica	0,738	4,6	29,3	5,9	6,3	147,13	35,35	...	0,1	...	76	99 (>0)	...	...
Dominican Rep.	0,680	9,8	46,8	1,9	2,3	...	...	...	...	...	...	2(>0)	...	...
Guatemala	0,569	14,0	37,7	2,1	3,2 (2008)	...	1,49	0,07	0,9	29	14	27(>0)	...	...
Mexico	0,762	112,0	879,7	2,7	4,9 (2008)	31,61	32,39	1,90	...	353	508	2.949 (0,38)	8.262	4.329 (52,40)
Panama	0,760	3,5	24,7	4,3	3,8 (2008)	35,38	14,52	3,58 (2007)	...	144	9	41 (>0)	...	...
Paraguay	0,651	6,3	14,2	2,4	4,0 (2008)	...	...	...	41,9	...	35	10 (>0)	...	....
Peru	0,714	28,8	126,9	2,5	2,6	...	...	0,45	0,8	...	35	10 (>0)	...	...
Uruguay	0,773	3,4	31,3	5,9	2,8 (2006)	61,68	40,12	0,88	0,0 **	...	189	194 (>0)	...	...
LAC	0,722					76,10	44,08			443 (***)	22.035	21.954 (2,88)	48.791	30.478 (62,47)

* ... Data not available.

** Greater than zero, but not enough to be rounded to zero.

*** Source: http://www.uis.unesco.org/FactSheets/Documents/fs13-HR%20in%20RD-2011-en.pdf

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Analysis of the present situation of the R&D on health in the LAC

Scientific publications: LILACS, MEDLINE and SCI

Country	Scientific publications indexed by LILACS (% in relation to LAC) 2009	Scientific publications indexed by MEDLINE (% in relation to LAC) 2009	Scientific publications indexed by SCI in health (Biology, biomedical research and clinical medicine) (% in respect of LAC) 2008
Argentina	1.051 (4,76)	2.456 (11.18)	3.531 (11.58)
Brazil	15.945 (72,36)	13.335 (60.74)	17.792 (58.38)
Costa Rica	76 (0,34)	99	...
Dominican Rep.	...	2	...
Guatemala	14 (0,06)	27	...
Mexico	508 (2,31)	2.949 (13.43)	4.329 (14.20)
Panama	9 (0,04)	41	...
Paraguay	35 (0,16)	10	...
Peru	35 (0,16)	10	...
Uruguay	189 (0,86)	194	...
LAC	22.035 (100)	21.954 (100)	30.478 (100)

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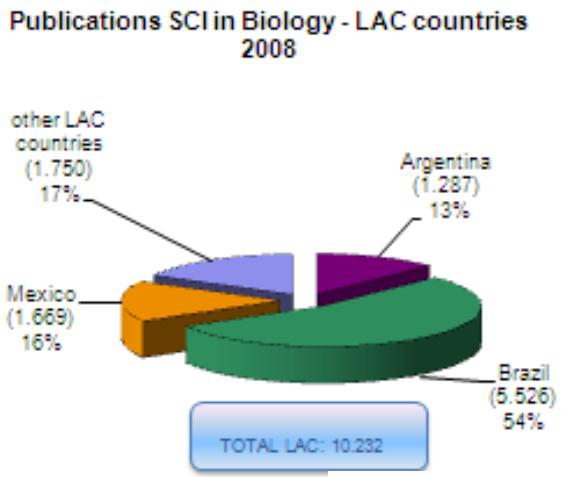
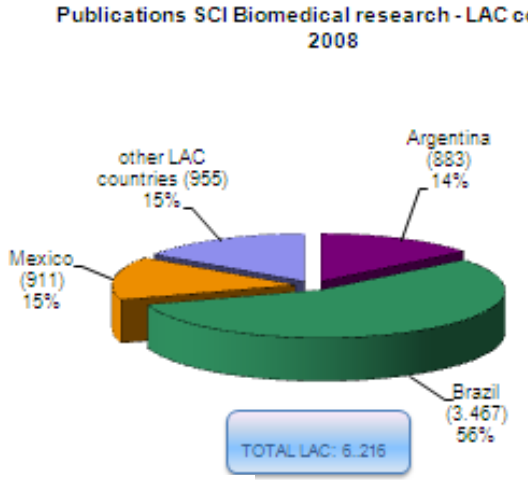
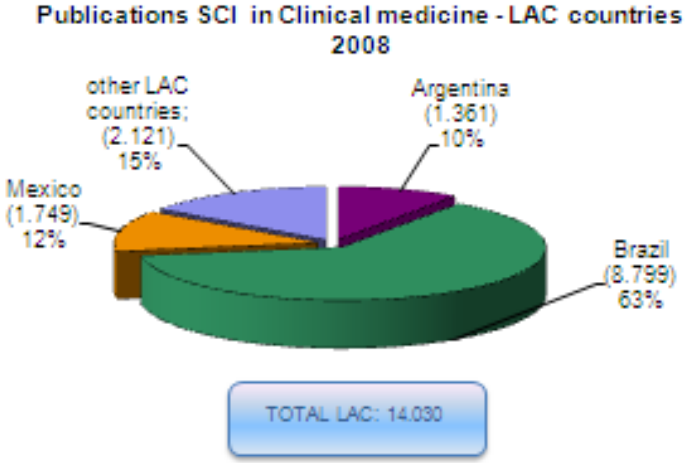
Source:
LILACS and MEDLINE: RICYT, 2012. http://bd.ricyt.org; SCI: UNESCO, 2010. Thomson Reuters (Scientific) Inc. Web of Science (Science Citation Index Expanded).

Analysis of the present situation of the R&D on health in the LAC







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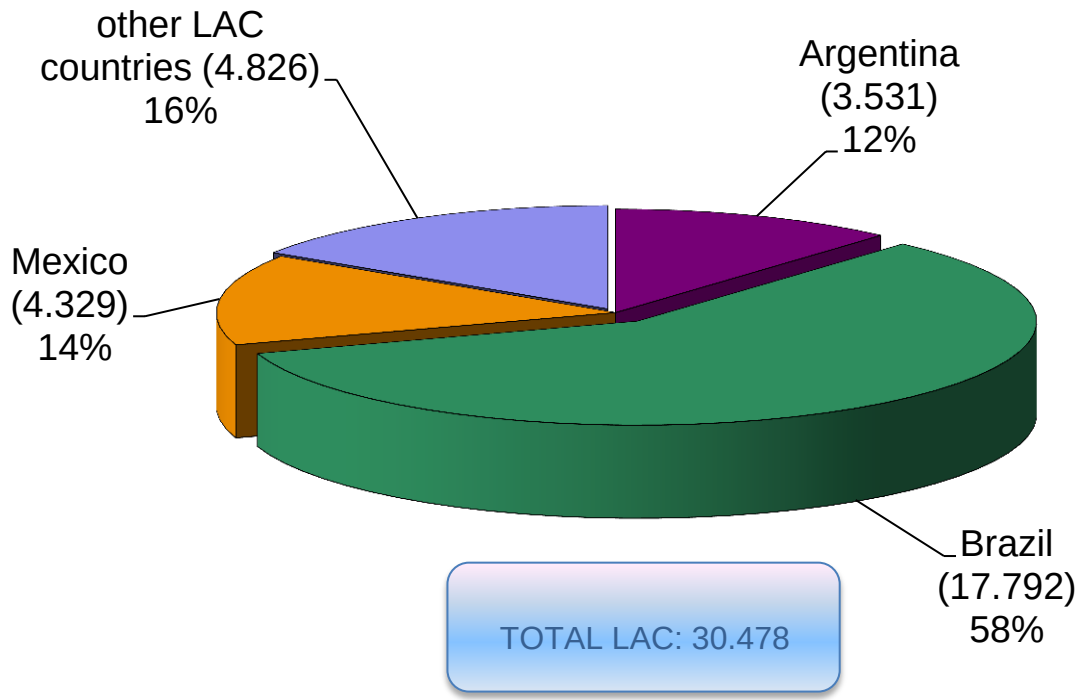
Source: UNESCO, 2010. Thomson Reuters (Scientific) Inc. Web of Science (Science Citation Index Expanded)

Analysis of the present situation of the R&D on health in the LAC

Publications SCI in health in LAC countries
Biology + Biomed. Research + clinical medicine
2008



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Source: UNESCO, 2010. Thomson Reuters (Scientific) Inc. Web of Science (Science Citation Index Expanded)

Analysis of the present situation of the R&D on health in the LAC

Health + education expenditure, STA, researchers, scientific public. in health

Country	Health expenditure, public (per capita) US$ 2009	Education expenditure (per capita) US$ 2008	Scientific & technological activities (per capita) US$ 2009	Researchers in R&D (per million people) 2007	Scientific publications indexed by SCI in health (Biology, biomedical research and clinical medicine) (% in respect of LAC) 2008	Scientific publications indexed by SCI in health (Biology, biomedical research and clinical medicine) (per million people) 2008
Argentina	391,5	489	51,50	980	3.531 (11.58%)	88,1
Brazil	288,7	232	130,53	657	17.792 (58.38%)	92,0
Costa Rica	369,6	268	147,13	...	...	...
Dominican Rep.	91,8	91	...	...	...	...
Guatemala	57,1	61	...	29	...	...
Mexico	212,5	378	31,61	353	4.329 (14.20%)	38,7
Panama	314,3	229	35,38	144	...	...
Paraguay	47,6	62	...	...	...	...
Peru	111,1	81	...	...	...	...
Uruguay	529,4	272	61,68	...	...	...
LAC			76,10	443	30.478 (100%)	

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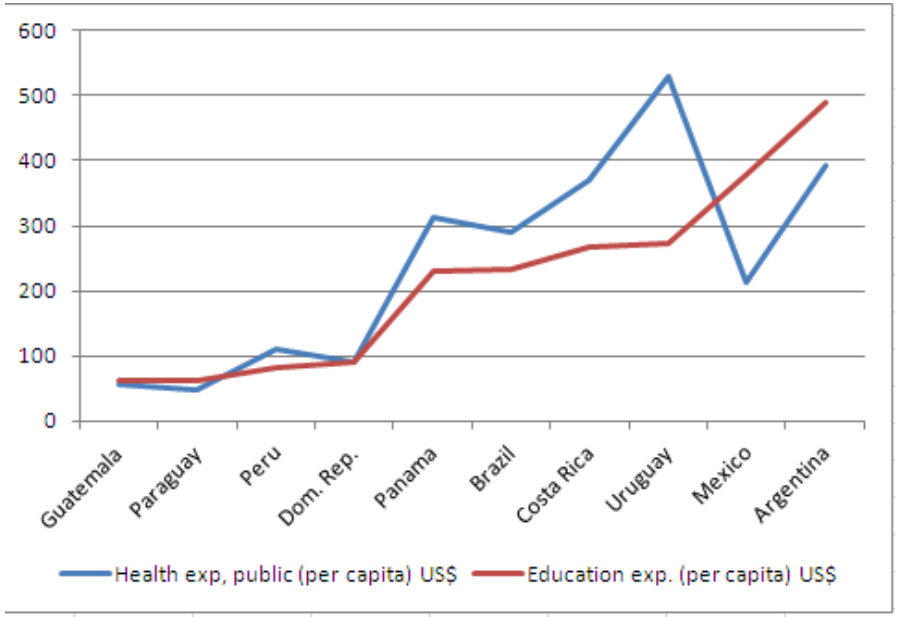
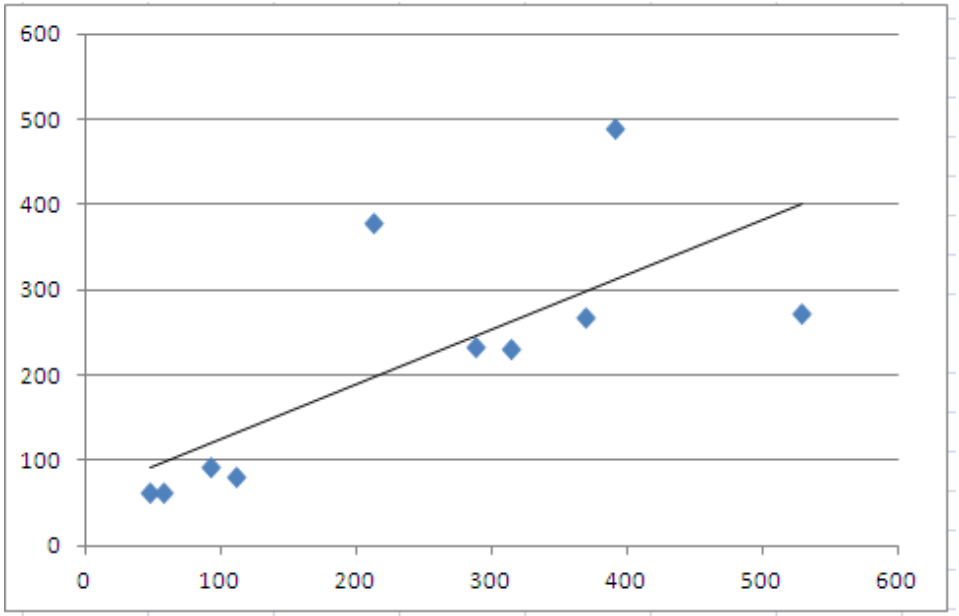
Health + education expenditure





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NHRS GOVERNANCE

Many countries in LA have a formal governance body dedicated to health research.

This governance is usually shared :

- health area responsible for clinical / public health research, more closely related to the country's health policy
- S&T responsible for biomedical research
- the degree of coordination— which is crucial for a NHRS — varies a lot between the countries.

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NHRS GOVERNANCE

Country	Governance body	Management structure	Specific policy	Laws and regulations
Brazil	Ministry of Health	Secretariat of Science, Technology and Strategic Inputs (SCITIE/MS)	Yes	Yes
	Ministry of Science and Technology	National Council of Scientific and Technological Development (CNPq)		
	Ministry of Education	Coordination for the Improvement of Higher Education Personnel (CAPES)		

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NHRS GOVERNANCE

- The development and consolidation of NHRS gained momentum in the second half of the last decade. Many countries have implemented (Peru), are implementing (Paraguay) or discussing / approving (Costa Rica, Dominican Republic) specific policies and structures for health research.

- Many countries still do not even have clear governance schemes for health research. In these countries, there is no continuity for financing, actors operate independently, with no coordination and it cannot be said that there is a Health Research System.

- Most countries have laws / regulations for clinical studies, ethical standards for research and product registration.

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NHRS GOVERNANCE

Country	Governance body	Management structure	Specific policy	Laws and regulations
Paraguay	National Council of Science and Technology (CONACYT) Ministry of Public Health and Social Welfare (MSPBS)	Interinstitutional Committee for the development of the National Health Research System National Council of Health Research Division of Research and Strategic Studies	Under implementation	Under implementation
Panama	SENACyT*		No	Yes

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MAJOR ACTORS IN THE NHRS

Funding agencies for health research:

- most of the financing comes from the government (federal + state)
- mainly through S&T agencies
- health financing as well as agencies are growing in importance
- in many small / poor countries, most of the financing comes from abroad

Health research execution:

- Public universities are the main actors *(-> importance of education financing not highlighted in the questionnaries*)
- Specialized institutes of the ministries of health also play an important role

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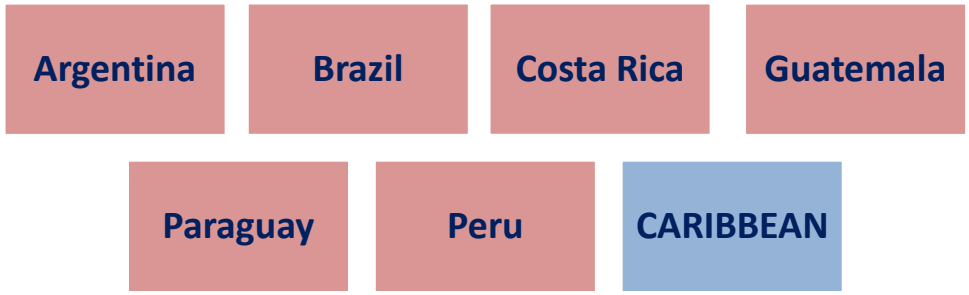
Priorities in Health Research

- **60%** of the analyzed countries and the Caribbean region **have a plan of priorities** for research in health



- Dominican Rep., Panama, Mexico and Uruguay are still working on it

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Priorities in Health Research

- Common feature to almost all countries with priority in health research area : **participatory process**
- The Caribbean Council for Health Research has defined common priorities for health research to all members of CARICOM which should be adopted/adapted by each country individually.
- Generally, LA countries tried to establish priorities for health research based on their National Health Plans.

  Argentina and Costa Rica, however, have lines of research priorities in health also in the framework of science and technology sector.

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Brazil - Priorities in health research

Brazil	**Goals of the health system:** Assuring the access of the population to high-quality health services, equitably, and in adequate time to meet health needs, improving basic health care and specialized care policies; Reducing risks to the health of the population, by health promotion actions and health surveillance; Promoting integral health care to women and children and implementing the Stork Network, with special attention to the most vulnerable regions and populations; Improving the network of urgencies and emergencies, including the expansion and adaptation of Emergency Care Units (the "Unidades de Pronto Atendimento" or "UPAs"), the Mobile Urgency Service (the "Serviço de Atendimento Móvel de Urgência" or "SAMU"), Emergency Centers and regulation centrals, coordinating them with other health care networks; Strengthening the network of mental health, stressing especially the fight against crack addiction and addiction to other drugs; Assuring integral health care to seniors and patients with chronic conditions, stimulating active and healthy aging and strengthening disease prevention and health promotion actions; Implementing the Indigenous Health Care Subsystem, in coordination with the Unified Health System (SUS), based on integral health care, taking health practices and traditional medicine into consideration, with social control and respecting cultural specificities; Contributing to the adequate training, wages, appraisal and democratization of the work relations of health professionals; Implementing a new model of management and an instrument to manage the relation between federative units, centrality in assuring access, participative management, focus on results, social participation and stable financing; Define direct action tools, generating productivity and efficiency gains for the Unified Health System (SUS); Assure pharmaceutical assistance within SUS; Strengthening the industries of science, technology and innovation in health as a structural axis in the national agenda of economic and social sustainable development, reducing vulnerabilities in the access to health and in the pharmaceutical assistance within SUS;

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Costa Rica - Priorities in health research

Costa Rica	**Priorities in the National Plan of Science and Technology in Health based on the country's epidemiological profile (Ministry of Health):** Chronic non-communicable diseases; Mental health; HIV/Aids; Food/nutritional security; Housing (water and waste management); Strengthening science and technology in health; **Health priorities in the National Science, Technology and Innovation Plan (Ministry of Science and Technology):** Emerging and reemerging diseases.

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Closing remarks

- Although the situation in the analyzed countries are very different, there has been a **solid momentum towards developing and/or consolidating necessary elements** for the concretization of a **National Health Research Systems**.

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Obrigada!

Thank you!

Muchas gracias!

Grazie!

Danke!

Merci beaucoup!

Paljon kiitoksia!

EU-LAC HEALTH is co-funded by the European Community's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 281459.

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