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ReAct
Action on Antibiotic Resistance

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In the previous issue of ReAct Quarterly, Kléver Calle of React Latin America briefly introduced the Research and Training Program in Comprehensive Primary Health Care. In this issue he goes on to give us a more thorough account: A Comprehensive and Multidisciplinary Approach to Addressing Infectious Diseases and Antimicrobial Resistance in the Community.

A Curriculum for Community Action on AMR

In Latin American countries, the primary health care system is where the bulk of infectious diseases are attended to and where the highest rates of inappropriate use of antibiotics and other antimicrobial agents occurs.

The Faculty of Medical Sciences of the University of Cuenca and ReAct Latin America, with the support of ReAct Global, the Pan American Health

Organization (PAHO) and the National Health Surveillance Agency of Brazil (ANVISA) are currently preparing the launch of the Research and Training Program in Comprehensive Primary Health Care, with emphasis on Prevalent Infectious Diseases and Containment of Antimicrobial Resistance.

This program is a response to public health demands and the constitution of Ecuador, which stipulates that the national health system is based on Primary Health Care (PHC), says Arturo Quizhpe, Dean of the Faculty of Medical Science at the University of Cuenca and Coordinator of ReAct Latin America.

With nearly 6 million deceased in 2008, infectious disease is still



Arturo Quizhpe

Coordinator of ReAct Latin America.

the leading cause of death globally in children under five years of age.[1].

"Despite the tremendous advances in recent years in controlling infectious diseases, they still pose a serious threat to Latin American countries," according to PAHO.[2] In Ecuador in 2007, the leading causes of mortality in children under 1 year were pneumonia, bacterial sepsis, diarrhea and gastroenteritis of presumed infectious origin.[3]

Antimicrobial Resistance

How could one explain this resurgence of diseases that were believed to be overcome? According to PAHO, it is partly due to the mutation of causative microorganisms and the consequent emergence of resistance to drugs commonly used for treatment and control.[4]

Due to the development of bacterial resistance to first generation



Primary Health Care staff in Ecuador.

antibiotics, 70% of neonatal infections in hospitals in low-and middle-income countries cannot be treated successfully with the regime recommended by the World Health Organization (WHO). [5]

"A higher frequency of resistant bacteria, particularly multidrug-resistant, increases the costs of health care as well as the rates of treatment failures and mortality", says Andreas Heddini, executive director of ReAct Global.

A proposal for comprehensive training

The three-level postgraduate program, "sets out to strengthen the capacity of primary health care professionals to resolve the major community health problems related to infectious diseases and antibiotic resistance and link members of the health team and their communities", says Elvira Palacios, associate professor at the Faculty of Medical Sciences.

"International evidence suggests that health systems that are based on a strong PHC orientation achieve better results; they are more equitable, more efficient, health care costs are lower and they achieve greater user satisfaction compared to health systems with weaker PHC orientation", according to PAHO. [6]

The most emblematic example of the success of PHC in the Americas is Cuba. A recent survey conducted by Stanford University, concludes that the emphasis on "primary care medicine, health education and universal coverage of health services may explain how Cuba has achieved levels of health of a developed country, with a budget of a developing country." [7]

"Comprehensive Primary Health Care (CPHC) in the spirit of Alma Ata is a strategy that includes clinical care and prevention of diseases, but

ultimately seeks to influence the economic, political and cultural aspects of health, based on multi-sectoral participation and community work", remarks Javier Peralta, scientific coordinator of ReAct Latin America.

The curriculum

From the framework of CPHC, the program's curriculum will be based on the clinical, microbiological and pharmacological problems faced daily by primary health care professionals in Ecuador, based on pedagogical-centred learning.

"Research will cross-cut the program and aim to strengthen the use of scientific methodology and critical analysis of the literature. Participatory action-research projects, connected to CPHC, will be developed which will contribute to knowledge and change", says Nicolás Campoverde, associate professor at the Faculty of Medical Sciences.

Kléver Calle, Communications Coordinator at ReAct Latin America, indicated that edu-communication will be the second cross-cutting axis through the program. "We hope that professionals acquire the tools necessary to arouse the participation of the community in the formulation of problems and in the subsequent development of interventions."

"After piloting the program in the Faculty of Medical Sciences", says Arturo Quizpe, "we will proceed to evaluate the process and materials, with the purpose of replicating the program in other Latin American countries. It will be turned into a virtual program to make it accessible to all interested professionals."

Mary Murray, Network Coordinator of ReAct Global says that the program has innovative features. "It will contribute to the containment of antimicrobial resistance, to a good management of the infectious diseases and to proper application of the principles of CPHC."

Nicolás Campoverde

Associate Professor at the Faculty of Medical Sciences at the University of Cuenca.



Mary Murray

Network Coordinator of ReAct Global

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ABR Workshop in Nairobi, Kenya

By Liselotte Diaz Högberg,
Deputy Director of ReAct Global

On May 5-7, the Ecumenical Pharmaceutical Network (EPN) arranged a workshop on antimicrobial resistance (AMR) together with ReAct and Management Sciences for Health (MSH). The workshop was designed to follow on to the previous two regional training workshops held as part of the Fight AMR - Save Medicines for Our Children campaign, held in English (Moshi 2008) and in French (Kigali 2009).



Participants at workshop on antimicrobial resistance in Nairobi, May 5-7 2010.

The Nairobi workshop provided an opportunity for EPN network members that have been actively involved in sensitization and raising

awareness on AMR issues at country level to share what they have been able to do since.

The workshop was attended by network members from all over the African continent as well as India and Moldova.

Participants shared experiences from a wide range of activities including local workshops targeting officials, health care staff and community members, educational activities for school children and other sensitization campaigns.

Interest was high among network members to continue to work with AMR issues, but the need for further material to aid their work was identified.

ReAct and EPN are currently collaborating on a project including development of a tool to measure the level of awareness about AMR and its consequences as well as developing advocacy and education materials to be included in the campaign.

[Read more about the Fight AMR campaign>](#)

ReAct Quarterly will be back in the fall with an issue focussing primarily on the ReAct/Uppsala University conference *The Global Need for Effective Antibiotics - Moving towards Concerted Action*. This invitational conference will build upon and deepen the discussions held at the expert meeting on *Innovative Incentives for Effective Antibacterials* organised by the Swedish EU Presidency in the fall of 2009.

Taking a global perspective on these problems, the Uppsala conference will pursue concrete solutions to critical issues such as establishing a framework for priority setting for research and development of new drugs and diagnostic methods, enhancing knowledge-sharing for drug discovery, and explore different combinations of incentives to reinvigorate the innovation of new antibacterials.

Until then, we wish you a pleasant summer!