

Improving public health and health systems through evidence informed policy in the Americas

Translating knowledge into policy and practice can improve public health and health systems in the Americas, say **Tomás Pantoja and colleagues**

The evidence informed policy making approach—where policy decisions are informed by the systematic and transparent use of evidence—captured a great deal of international attention at the beginning of the millennium. The movement was spurred on by the 2004 *World Report on Knowledge for Better Health* and the statements issued at the Ministerial Summits on Health Research in Mexico City in 2005 and Bamako, Mali, in 2008, both convened by the World Health Organization.^{1,2} More recently, the United Nations' *Agenda 2030* for sustainable development formulated 17 goals for global development, and policies informed by research will be key.

In this context, the Pan American Health Organization/World Health Organization (PAHO/WHO) developed its "Policy on Research for Health" in 2009.³ The policy stressed the need for minimum quality standards and relevance in the research being conducted to inform health policy. It also outlined the environment needed to produce impactful research, which is effective research governance and a skilled workforce working in partnership networks.³ The policy's objective of attaining a positive health impact through research relies on

establishing constructive communication between the different stakeholders who fund, produce, and use research. This entails empowering civil society organisations to set research priorities, and making research findings available in formats appropriate for different audiences.

The objective of this article is to examine current challenges to research for health and describe successful initiatives implemented in the Americas that aim to make a positive impact on population health.

Main challenges

Researchers have identified challenges and limitations that hinder efforts to link research to policy action at the country level.⁴ These challenges can be grouped into three main areas: the sociopolitical climate for research use; the research production process; and the translation of research findings. Research is often undervalued, seen as irrelevant, or too difficult to use to inform policy making.

Although policy makers in many countries in the Americas acknowledge the benefits of using research to guide decisions to improve health systems, current actions still pale in comparison to the achievements by the evidence based medicine movement. Research producers and users are still struggling to work out the scientific foundations of health policy and systems research.⁵ Additionally, the systematic use of research in health system decision making processes has not been formally established in policy making schemes. It is, currently, greatly dependent on the background of decision makers and their personal relationships with researchers and healthcare practitioners.⁶

The Americas, including the Caribbean region, produce 46% of the world's public health research—but most of that (37%) comes from the United States,⁷ and it is not always directly relevant to PAHO member states.⁸ A more systematic approach is needed to generate priorities and fund research that is relevant and useful to the Americas. National health research systems, people, institutions, and activities that generate high quality research to promote, restore, and maintain the health status of populations, are one way to ensure that research will meet national public health needs. The growth and consolidation of

these systems in the Americas has been uneven, however, and based on individual or isolated capacity building initiatives.⁹

In 2005, the World Health Assembly urged countries to create national infrastructures to promote evidence based policy and evidence based public health and healthcare delivery systems.¹⁰ In practice, such infrastructure consists of programmes, interventions, and tools that disseminate and facilitate access to research information, foster knowledge exchange between stakeholders, and use evidence to inform healthcare organisations and health systems.¹¹ Such formal infrastructure, however, is not currently in place in many countries in the Americas.¹² In most cases, activities are developed as one-off projects with no sustainable funding beyond the project life cycle. Although some initiatives have promoted dialogue between research producers and users, the high turnover of public health authorities, and even of technical teams within the health and technology sectors, hinder the development of long term knowledge translation activities.¹² Additionally, the lack of a formal infrastructure to coordinate national efforts to translate research into policy and promote exchange of experiences between the countries of the Americas has limited collective learning and resource sharing in the area of knowledge translation.

Successful initiatives

Knowledge translation initiatives in the Americas have not undergone a comprehensive review. However, there are cases in Brazil, Chile, and Peru where the challenges faced when attempting to link research to policy action have been tackled. These case studies were selected by the authors based on their direct knowledge of them.

In Peru, in recent years, the sociopolitical climate for research use has improved thanks to the work of non-academic research units that promote the use of research evidence in the health system. Following two initiatives where research findings helped to inform policy decisions, Peru's Ministry of Health established formal processes for demanding research evidence. The two initiatives focused on the abortive effects of the morning after contraceptive pill, and the potential health impact of transgenic foods.¹³ Research evidence is now required

KEY MESSAGES

- Many policy makers in the Americas acknowledge the relevance of using research to inform decisions made for their health systems
- Knowledge translation is much more accepted, however, in clinical and public health policy making compared with the health systems field
- In the Americas, the growth and consolidation of national health research systems to generate research evidence has been uneven and based on isolated capacity building initiatives
- Some countries have established a formal infrastructure to implement research translation efforts at national level
- Despite this, in most cases, activities are developed as one-off projects with no sustainable funding beyond the specific project life cycle

to inform decisions on programme budgets, the redesign of health programmes at national and subnational levels, and the selection of specific health interventions to be funded by the ministry. In order to tackle Peru's need for evidence, the Unit for Generation and Analysis of Evidence in Public Health has been set up at the National Institute of Health.¹⁴ Furthermore, these formal processes have been expanded to other directorates in the Ministry of Health, and collaboration between groups working on clinical guidelines and health technology assessment has started.

In Chile, the National Health Research Fund (FONIS) is a cost effective initiative that was set up to produce relevant research to aid decision makers tackling problems in the country's health system.¹⁵ Since 2003, FONIS has competitively funded projects in the areas of the effectiveness of clinical and public health interventions; environmental and occupational health; equity in access to healthcare; health promotion and risk factor control; quality of healthcare and user satisfaction with health services; and methods for measuring the impact on health of public policies implemented by the non-health sector. Over its first 10 years, FONIS funded 300 projects costing around \$10m (£7.5m; €8.6m) in total. Research funded by FONIS has had an impact on national policy. Changes in the tobacco law in Chile, for example, were informed by FONIS funded research.^{16 17}

In 2006, WHO launched its evidence informed policy network (EVIPNet) to tackle the challenge of translating research into policy in the Americas and worldwide. EVIPNet develops sustainable partnerships between policy makers, researchers, and civil society to increase the capacity of countries to develop health policies using research evidence.¹⁸ PAHO launched EVIPNet in the Americas in 2007 and by the end of 2013 there were teams in 12 countries.¹² EVIPNet country teams form the institutional infrastructure necessary to translate research findings into effective policies. The two main outputs from EVIPNet's country teams are contextualised, user friendly evidence briefs for policy that present a research synthesis of different policy options; and policy dialogues, which are structured discussions focused on an evidence brief that are used to formulate policy.¹⁹ By 2013, over 700 country officers and experts had participated in training, developed 14 evidence briefs, and conducted 10 deliberative dialogues in eight countries.¹² Brazil has led the way in implementing successful EVIPNet activities and products (box 1).²⁰ Although EVIPNet is not the only initiative tackling the challenge of translating research into policy, it has provided a template for organising

Box 1: The experience of EVIPNet-Brazil

- In 2016, EVIPNet-Brazil published a series of eight health evidence syntheses for policy in key public priority areas. High infant mortality rates in north and northeastern Brazil were the impetus behind this push to use evidence. The evidence showed how high infant mortality bore a direct correlation to poor quality of care during labour and delivery, with insufficiently trained healthcare workers neglecting to follow established protocols and guidelines for care. In the low resource municipality of Piripiri, research showed that 60% of all newborn deaths were preventable.
- EVIPNet-Brazil approached this issue by presenting evidence informed policy options in partnership with the local health council. Policy dialogues led to the selection of options with the greatest potential impact, involving complex local planning for more than 30 interventions based on the best available evidence. This work helped to successfully reduce infant mortality rates in Piripiri from 21 per 1000 live births in 2009, to 7 per 1000 live births in 2011.
- EVIPNet-Brazil is currently adapting this evidence into a policy model so that it can be replicated in several other Brazilian localities, where local working groups will tackle their own health issues, prepare evidence syntheses, and organise policy dialogues on the matters affecting them. Other public health priority issues include sickle cell anaemia, air pollution, congenital heart disease, tuberculosis in the homeless population, early childhood development, and road traffic deaths.

activities in other countries in the Americas (Chile, for example).²¹ It has also provided field opportunities for capacity building, assisting both researchers and decision makers through the network of the global EVIPNet initiative.

Pending agenda

In order to produce relevant research to inform decision making in health, countries need to adopt a systematic approach to strengthening national health research systems.²² This requires a well defined policy or programme linked to national priorities for research for health; structures for coordinating and managing research; sustainable financing mechanisms; and a defined set of indicators for monitoring and evaluation. PAHO is well positioned to promote the adoption of this approach in the countries of the Americas, building on successful experiences and connecting systematically and consistently current isolated initiatives.

Despite some success in knowledge translation in the Americas,^{20 21} in most countries the research translation infrastructure still needs strengthening. Countries also need to promote and support the development of research translation teams. This is crucial in countries where some translation activities have been carried out, but where no formal infrastructure has been established for regional or global collaboration. Beyond funding issues, taking stock of successes and failures after 10 years of effort in this area will constitute a short term priority. PAHO is attempting to tackle the challenges hindering knowledge translation by working closely with partners and developing strategic alliances. These include working with Canada's McMaster University and Brazil's Latin American and Caribbean Center for Health Science Information; making the regional virtual

health library and comprehensive system of literature databases available; and working with WHO's Alliance for Health Policy and Systems Research.

There has been no formal assessment across the Americas of the sociopolitical climate in relation to the use of research to inform policy, with data on this matter scattered across policy documents in different countries. Nor has there been a systematic effort to collect information about the prevailing attitudes towards knowledge translation, such as efforts made in the Middle East and some African countries.^{23 24} This type of information could enable the design of tailored strategies. PAHO is well placed to mobilise groups of regional experts working in the field and tackle this issue.

Conclusion

At a country level, there are a number of challenges to linking research to policy action. These concern the sociopolitical climate related to research use; the production of relevant research; and the translation of research findings. PAHO's *Policy on Research for Health* has provided a general framework for developing successful initiatives in the Americas. Over the past decade, progress has been made in the establishment of national health research systems; and in the availability of country level teams with the skills to identify, assess, summarise, and package research evidence. Progress has also been made in establishing standardised processes for the use of evidence in policy making (for example, EVIPNet processes) with teams of regional experts supporting these efforts. However, obstacles to generating impact through research remain embedded within the region's health systems. PAHO and its Policy on Research for Health will be key in delineating the next steps in

achieving a positive health impact through research on health systems in the Americas.

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