

Country: Jamaica

Committee: Commission on Science and Technology for Development

Delegates: Marco Mauri & Davide Comuzzi

Topic A: The Development of Global Health technology

General overview

Health technology assessment, the HTA, has grown out of the tension between new and often costly health technologies and limited healthcare budgets. HTA has been called ‘the bridge between evidence and policy-making’, because it seeks to provide a range of stakeholders (typically those involved in funding, planning, purchasing and investing in healthcare) with accessible, useable and evidence-based information that will guide decisions about technology and the efficient allocation of resources. Health technologies include drugs, medical devices and clinical/surgical procedures.

HTA is a ‘multidisciplinary activity that systematically examines the technical performance, safety, clinical efficacy and effectiveness, cost, cost-effectiveness, organisational implications, social consequences, legal and ethical considerations of the application of a health technology’. HTA has to take into consideration all aspects that might be influenced by the technology as well as those influencing the technology.

The importance of HTA to healthcare decision-makers

In contrast to the licensing processes for drugs and medical devices, which assess quality, safety and efficacy, HTA focuses on ‘the value’ (clinical and economic) of the technology relative to current (or best) clinical practice – the so-called ‘fourth hurdle’. In the UK, HTA has broadly focused on two issues:

- 1 Clinical effectiveness – how do the health outcomes of the technology compare with available treatment alternatives?
- 1 Cost-effectiveness – are these improvements in health outcomes commensurate with the additional costs of the technology?

HTA can help policy-makers decide which technologies are effective and which are not, and define the most appropriate indications for their use. HTA can reduce or eliminate interventions that are unsafe and ineffective, or whose cost is too high compared with the benefits. That said, to date, most international HTA activity has been directed at quantifying the use of new and expensive pharmaceuticals.

Country position

Health Systems and Services: The Health Service Delivery in the public sector is provided through a network of Secondary/Tertiary Care facilities consisting of 24 hospitals including 5 specialist institutions (with a bed complement of 4736); and Primary Care facilities comprising 348 health centers, managed by the four Regional Health Authorities.

However, the Health Information System (HIS) is very fragmented and no HIS policy and strategic framework exist. In general, Information for planning, decision making and development of accurate situation analysis is not readily available.

There is a general shortage of health care providers on key areas of health service delivery due in large part to a high attrition rate of skilled personnel, especially Dentists, Nurses and Rehabilitation Specialists in speech and occupational therapy.

There is limited drug production from imported raw material. There is a system of pharmacovigilance in place to ensure quality maintenance. The majority of the drugs used locally is imported and as prices fluctuate this leads to an increase in costs to the end user. In the long term this is not a sustainable practice.

Environmental Determinants of Health: Jamaica is on track with its water supply (93%) and sanitation coverage (80%) to meet the Millennium Development Goal (MDG) targets for 2015. However, water and sanitation needs are still not fully covered in rural areas (currently at 42%, compared to 87% in urban areas). There are currently a number of policies, legislation and guidelines that address different aspects of sanitation but their interrelationship is not well

defined. Gaps, overlaps and sometimes conflicts exist resulting in less than optimal utilization of scarce resources and the long-term beneficial impacts of some programmes are never realized.

MDGs: As part of the implementation of the MDGs, the Ministry of Health continues to focus its efforts on the 3 MDG priority areas for the health sector (reducing child mortality, improving maternal health and combating HIV/AIDS, Malaria and other diseases). The 2009 National Report for the ECOSOC Annual Ministerial Review notes that significant progress has been made in the three areas mentioned above. However, the prevalence of noncommunicable diseases which now account for more than 50% of fatal disease outcomes was highlighted.

Restructuring process focusing on improvements in quality of care, efficiency in health services delivery, increasing access and accountability in the management of health services.

- Existence of Jamaica National Development Plan: Vision 2030 that outlines the long term

development goals including health.

- Ratification of a number of International Conventions such as IHR(2005); WHO/FCTC.
- Existing bilateral and Intergovernmental partnerships for technical cooperation.
- Existence and effective implementation of the UNDAF which has a major outcome on health.

Points to improve in public health leadership and management.

- Weak and fragmented health information system with no national health information policy, unreliable data and limited reporting by the private sector.
- High incidence of crime and violence and costs to the health sector.
- Increase in the burden of chronic non communicable conditions and risk factors.
- Migration of health human resources.
- Weak Essential Public Health Functions: High vulnerability to natural hazards.
- Environmental degradation and hazards due to inadequate land use/planning.
- Insufficient policy frameworks and standards and inadequate planning, monitoring and evaluation, and enforcement of health legislation.
- Health care financing and sustainability of health services
- Reduction in national budget and external aid due to country's classification as "Lower Middle Income country".
- Low absorptive capacity for health development programmes in the Public Sector

Proposed actions and solutions

Jamaican government is open to join every solution that can improve Jamaican points listed

above; countries that will participate at eventual plans, allowing the use and the help of their scientist in these fields to the Jamaican nation, will have the opportunity to have economic benefits.

Bibliography

http://www.medicine.ox.ac.uk/bandolier/painres/download/whatis/What_is_health_tech.pdf

http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_jam_en.pdf

<https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>

TOPIC B: Biotechnology Capacity Building

Introduction

At the United Nations Conference on Environment and Development (UNCED), the international community recognized the important role that biotechnology would play in agriculture, health, industry, and environment. Biotechnology could be a way which countries can use to reach a state of development. The use of biotechnology can also provide economic and social welfare benefits. Furthermore, biotechnology can contribute both to the national economy, through increased production and decreased social costs and to an improved environment. But most of the country, which seek this kind of development, cannot reach it by their self because they are mostly poor and so industrialized countries should help them with economical traded.

Focus on Jamaica

Jamaica is an important market for U.S. for agricultural products (corn and rice), intermediate products (crude oil) and high value products (soybean oil and snack food) with a total value of 225 million. The country continues to build technical capacities in biotechnology through its academic programs and research centers because developments in this field are essential to agro-industrial development, human and environmental health, biosafety and biodiversity, and protection of natural resources.

Jamaica is currently developing legislation to ratify the CDP to regulate the importations and the use of the products of modern biotechnology. This protocol regulates the importations of genetically modified organism (GMO) for laboratory purpose. Jamaica does not permit commercial of living modified organism (LMO) into the natural environment. Under the Plants Quarantine Act, Jamaica has legislated the Plants Importations Control Regulations in 1997 to govern the importation of LMOs for the purpose of experimentation under controlled conditions. But that is the

only because there is no identity preservation program that requires the segregations of shipments of grains or other agricultural commodities from U.S.

In accordance with the Cartagena Protocol on Bio-safety (CPB), the draft National Bio-safety Framework focuses on developing regulations to ensure adequate protection in the safe transfer, handling, contained use, deliberate release or placing on the market of any LMOs that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health.

International trades

In June 2001, Jamaica signed the Cartagena Protocol on Biosafety, a supplementary agreement to the Convention on Biological Diversity. The protocol aims to contribute ensuring an adequate level of protection in the use of Genetically Modified Organism (HMOs).

As a party to the Convention on Biological Diversity and a signatory to the Cartagena Protocol on Bio-safety (CDP), Jamaica's biotechnology policies seek a balance between the economic benefits of genetic engineering and the preservation of biological diversity.

The National Bio-safety Committee (NBC) continues to monitor the papaya project, controlling the development, the importations and the production.

Proposed actions and solutions

In the future, imports of U.S food and agricultural products will be influenced increasingly by Jamaica's biotechnology and bio-safety policies. The biotechnology Center of the University of the West Indies is working on developing transgenic variety of papaya (resistant to the Papaya Ringspot Virus) and it wants to start with new variety of hot pepper, pumpkin and citrus. There are other Centers and other Departments that are focused on improving resistance for cotton to pests and diseases.

With a stronger collaboration with international institutions, Jamaica could advance in

biotechnology agenda and realize the associated socio-economic benefits.

Bibliography

<http://imuna.org/nhsmun/committee/commission-science-and-technology-development>

<https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>

<http://ceq.hss.doe.gov/>

<http://www.unep.org/biosafety/>

<http://www.cabinet.gov.jm/files/Government%20of%20Jamaica%20Policy%20Development%20Programme%20as%20at%2030%20June%202010.pdf>

http://www.iica.int/Esp/Programas/Innovacion/Documentos%20de%20Tecnologa%20e%20Innovacin/IICA_ISAAA%20launch_CARIBB_Jun2011.pdf

<http://www.nepa.gov.jm/documents/Draft-Biosafety-Policy.pdf>