Vaccine production, distribution, access, and uptake

For human vaccines to be available on a global scale, complex production methods, meticulous quality control, and reliable distribution channels are needed to ensure that the products are potent and effective at the point of use. The technologies used to manufacture different types of vaccines can strongly affect vaccine cost, ease of industrial scale-up, stability, and, ultimately, worldwide availability. The complexity of manufacturing is compounded by the need for different formulations in different countries and age-groups. Reliable vaccine production in appropriate quantities and at affordable prices is the cornerstone of developing global vaccination policies. However, to ensure optimum access and uptake, strong partnerships are needed between private manufacturers, regulatory authorities, and national and international public health services. For vaccines whose supply is insufficient to meet demand, prioritisation of target groups can increase the effect of these vaccines.* 

Global Health News:

Foodborne outbreaks: Managing risks

The deadly outbreak of Escherichia coli (E. coli) infection in Germany raised fears and questions about food safety in well-regulated countries. [In this interview, Maged Younes, Director of the Department of food safety at the World Health Organization, discusses the outbreak. According to Younes, "It will take time to fully assess all of the lessons to be gleaned from the events in Germany, but a few points can be highlighted. Outbreaks of foodborne disease are particularly likely to have economic implications as they often involve commercially produced products. Consumers will often react to concerns about a particular food by avoiding consumption of similar products, even if there is no evidence to warrant it. To manage the risk of harming the public, governments must assess the evidence and make decisions to protect people's health, even if there may be economic consequences. What was unusual about this event was the broad recommendation to avoid eating three entire groups of foods. [...] While such broad warnings can be justified, having them in place for an extended period of time can inflict economic damage and destroy livelihoods, even outside the affected country, as seen in this case. However, it must be stressed that public health authorities must always balance the health risk to the population against other undesirable consequences."]


Research on Health & States in Crisis/Conflict:

Health care in danger: Making the case

Armed conflict and internal disturbances – such as violent protests and riots – cause injuries among those directly participating and those who get caught in the way. Serious injuries require medical attention, yet it is precisely at these moments of greatest need that health-care services are most vulnerable to disruption, interference and attack. Violence, both actual and threatened, affects the delivery of health care in several ways. First, active fighting in the vicinity of health-care facilities prevents access to them by the wounded and the sick, health-care staff, and vehicles carrying essential medicines and medical equipment to resupply these facilities. Fighting can also disrupt the flow of water and electricity, as well as fuel supplies for back-up generators. [...] Second, violence can set off the displacement of civilians, including health-care personnel and their families, to safer areas. [...] Third, violence hampers the implementation of important preventive health-care programmes (such as vaccination campaigns), which might have implications long into the future. [...] Furthermore, conflict causes the displacement of people to areas that are often beyond the reach of regular health-care systems, just at the moment when they are most vulnerable to disease. These disruptions to health care caused by violence are less visible and more difficult to measure than overt attacks against health-care personnel and facilities. But they are just as deadly for all the wounded and sick who never manage to reach the help they require.*†

GLOBAL HEALTH NEWS:

Health in the Horn of Africa: A collective response needed
Between July 20 and August 3, the UN declared famine in five regions of Somalia. The disaster is expected to spread to all eight regions of the country in 4—6 weeks and is likely to persist until at least December this year. [...] According to WHO, the number of people becoming infected with measles and waterborne diseases is growing at an alarming rate, and cases of severe diarrhoea in Kenya and Ethiopia are a serious concern. Furthermore, hundreds of thousands of refugees from Somalia have fled to neighbouring countries, in particular Kenya and Ethiopia, and the ongoing refugee crisis has raised the risk of diseases associated with crowding such as measles, diphtheria, pertussis, acute respiratory infections, meningococcal disease, and tuberculosis. Additionally, humanitarian organisations reported that women in the refugee camps faced a drastic increase in sexual violence, which has put them at high risk of contracting HIV/AIDS.*


RESEARCH ON HUMAN RIGHTS & GLOBAL HEALTH:

Fanm ayisyen pap kase: Respecting the right to health of Haitian women and girls
The right to be free from sexual violence is a fundamental component of the right to health and is particularly threatened in post-disaster contexts. [...] Although the international community responds differently to post-disaster and conflict situations, the two cause similar patterns of displacement that create conditions under which women and girls are at a heightened risk of sexual violence. In conflict areas, civilians are often forced to flee their homes and live with inadequate food, water, and housing; families are torn apart as members are killed or go missing; and individuals retain little or no means of subsistence. Disaster areas have similar effects: death and disease often decimate families; people must live with insufficient food, water, and housing; and means of sustenance may be removed due to the destruction of local infrastructure. In both contexts, many people rely on government or international actors to meet their basic needs. [...] In this article, [the authors] use Haiti as a case study to illustrate the post-earthquake crisis of rape and sexual violence.**


GLOBAL HEALTH NEWS:

Health care systems and conflict: A fragile state of affairs
While health care systems are necessary in all countries, the importance of strong health care systems to fragile nations, and the damage done to these systems during conflict, receives less attention than [it] should. There are various definitions of what constitutes a fragile country or society, but most agree that a fragile state is one in which the government is unable or unwilling to deliver basic security and public services to the majority of its people, especially to the poor. These countries are frequently torn by armed conflict and plagued by high rates of poverty, creating a vicious cycle from which it is difficult to emerge. [...] The development of fragile states is complex: security must be provided and maintained, unemployment addressed, and education fostered. The adequate and equitable provision of quality health care is also, however, a fundamental need. This need will be met only if health systems and structures are preserved and developed, and if health care personnel have the freedom and safety to provide necessary care to those who need it.*

GLOBAL HEALTH GOVERNANCE

Rise and fall of global health as a foreign policy issue

[Having] witnessed global health’s rise as a foreign policy issue [we] are starting to see a fall in its foreign policy significance. However disconcerting, understanding this rise and potential fall is important in assessing how global health factors into world affairs now and in the foreseeable future. In this article, foreign policy refers to the policies a state advances in relations with other states, intergovernmental organizations (IGOs), and non-state actors (e.g., non-governmental organizations) on issues that have cross-border consequences. Global health means the policy realm in which states, IGOs, and non-state actors interact to address health challenges that have cross-border implications. […] This analysis exposes features about the relationship between global health and foreign policy that requires an understanding of how foreign policy makers address global health. A key finding is the unstable position of health within foreign policy, or health’s elasticity as a foreign policy issue. This elasticity suggests that a rise and fall pattern should be anticipated, as earlier rise and fall episodes confirm.*†


GLOBAL HEALTH NEWS:

Donors continue to hold back support from Global Fund

The Global Fund remains millions of dollars short of what it needs to operate as governments continue to withhold donations over in-country corruption allegations. […] The result is that resources available to the Global Fund for 2011 remain US$0.5 billion short of what the Fund was expecting for this year. […] Between 2008 and 2010, resources available to the Global Fund grew by about 8% a year, reaching almost $3.6 billion in 2010. But at the tenth pledging round of the fund for 2011-13, donors promised to give substantially less than what the Fund had hoped for; the Global Fund received $11.7 billion for the 3 years. Although this was 20% more than the fund received for 2008-10, it fell well short of what the Fund said it needed to maintain progress. In January, the Global Fund was already preparing to scale back on its planned new activities when a spate of negative articles, triggered by a story by the Associated Press about misuse of Global Fund money, caused three major donors to get cold feet [Sweden, Germany and Denmark].*

Configuring balanced scorecards for measuring health system performance: Evidence from 5 years’ evaluation in Afghanistan

In 2004, Afghanistan pioneered a balanced scorecard (BSC) performance system to manage the delivery of primary health care services. This study examines the trends of 29 key performance indicators over a 5-year period between 2004 and 2008. [...] There was a progressive improvement in the national median scores scaled from 0-100 between 2004 and 2008 in all six domains: patient and community satisfaction of services (65.3-84.5, p<0.0001); provider satisfaction (65.4-79.2, p<0.01); capacity for service provision (47.4-76.4, p<0.0001); quality of services (40.5-67.4, p<0.0001); and overall vision for pro-poor and pro-female health services (52.0-52.6). The financial domain also showed improvement until 2007 (84.4-95.7, p<0.01), after which user fees were eliminated. By 2008, all provinces achieved the upper benchmark of national median set in 2004. The BSC has been successfully employed to assess and improve health service capacity and service delivery using performance benchmarking during the 5-year period. However, scorecard reconfigurations are needed to integrate effectiveness and efficiency measures and accommodate changes in health systems policy and strategy architecture to ensure its continued relevance and effectiveness as a comprehensive health system performance measure.*


Global Health News:

Healthcare deserts: Severe healthcare deprivation among children in developing countries

Around 40 million children under five in 25 developing countries live in ‘healthcare deserts’ where they are deprived even of the most basic health services. [...] Severe healthcare deprivation is defined here as the situation of children who do not receive routine immunisations or treatment for diarrhoea. The large majority of children who suffer from severe healthcare deprivation are from very poor households. India, Nigeria and Ethiopia account for the highest number of severely healthcare deprived children. A previous study found that one child in seven in developing countries was severely healthcare deprived, and our review of more recent Demographic and Health Surveys (DHS) data shows that this proportion has remained largely the same in 25 countries with high under-five mortality burden. [...] In Nigeria and Ethiopia the proportion of children experiencing severe healthcare deprivation increased significantly, between 2003 and 2008, and between 2000 and 2005 respectively. This deterioration coincided with significant improvements in child mortality in both countries. Two factors emerge. Firstly, gains in child survival were unequal, with mortality rates falling more slowly among poorer quintiles that were also least likely to have access to healthcare. Secondly, factors other than healthcare – such as nutrition, water and sanitation, and maternal education – are likely to have made a significant contribution towards falling mortality.†


Migration of health professionals from India: Tracking the flow

Anecdotal evidence suggests that over the decades, large numbers of Indian physicians have traveled to countries such as the United States, the United Kingdom, Canada, and Australia in pursuit of residency training and practice positions. [...] In 2000, the total number of Indian physicians who had emigrated was reported to be around 20,315, which was approximately 3.8% of the total physicians trained in the country. Another report in 2005 estimated that the total number of Indian medical graduates working in the United States, the United Kingdom, Canada, and Australia was 59,095, which was equivalent to 10.1% of the physicians registered by the Medical Council of India at that time. [...] The Government of India has undertaken and is planning initiatives to encourage orderly labor migration from India. Most of these initiatives are directed towards ensuring better protection and welfare of the migrants, with the overall objective of making migration more manageable and systematic. These initiatives have provided an opportunity for skilled and qualified Indian professionals to capitalize on the openings provided by a globalized labor economy. However, in the context of growing concerns regarding the migration of health professionals and consequent shortages in source countries like India, there is an emerging need to establish an effective system in the country to regularize the migration of skilled professionals, especially health workers. One such step could be the collection of data and exchange of information between countries to promote a sound empirical basis for action.*†


GLOBAL HEALTH NEWS:

Nigeria: Health Minister Calls for Diaspora Help

Health Minister Christian Chukwu has called on Nigeria's health professionals to "show more commitment and concern to the health of the nation." The minister made the plea in a message targeted at hundreds of thousands of Nigerian-born health experts working abroad during the preliminary events marking this year's Diaspora Day in Abuja ahead of the main celebration today. [...] The ministry's director for special projects, Folake Majekodunmi, who spoke on behalf of the minister, said the ministry needed to work closely with Nigerian health workers in Diaspora to effectively channel their talents and efforts of health missions to much needed areas. [...] On average, 2,500 doctors, 5,500 nurses and 800 pharmacists graduate into the health sector every year, noted a government publication studying human resources for Health Strategic Plan. But many leave for work abroad in search of better pay and working conditions. More than 13,000 nurses sought employment outside Nigeria between 2004 and 2006.*

**Research on Trade Policy & Health:**

**The United States – Dominican Republic – Central American free trade agreement and access to medicines in Costa Rica: A human rights impact assessment**

The conclusions of a Human Rights Impact Assessment [HRIA] are derived from an analysis of the changes in the human rights indicators in comparison to the baseline situation and should be expressed in terms of impact on the capacity of government (and, where relevant, other actors beyond government) to meet human rights responsibilities, as well as impact on individuals' enjoyment of human rights. In addition, the conclusions should make a statement in relation to the extent to which the process of trade negotiations have affected or could in the future affect human rights. The Costa Rica HRIA concluded that Central American Free Trade Agreement [CAFTA] was likely to strengthen the position of innovator pharmaceutical companies, by extending market exclusivity periods and allowing companies to increase prices of pharmaceuticals. [...] In terms of the impact on government capacity, the need to increase the essential medicines budget as a result of increased prices of pharmaceuticals would place pressure on the CCSS budget, while reducing the market share for generic pharmaceutical companies. [...] In relation to the impact on individuals' enjoyment of human rights, the extent to which the additional pressure placed on the CCSS flows through to individuals depends on [a number of variables]. In particular, the existence of the solid institutional framework to ensure access to essential medicines and the relatively easily accessible *amparo* remedy should be helpful in avoiding individuals not having access to essential medicines [...] Finally, in terms of process, the negotiation and adoption of CAFTA in many ways respected process-related human rights, particularly political rights.*†


**Global Health News:**

**EU-India agreement in WTO dispute raises bar for EU drug seizures**

India and the European Union (EU) announced a written agreement [29 July] that puts more conditions on EU customs authorities before they can stop shipments of generic pharmaceuticals passing through Europe. [...] According to an Indian release, the Understanding provides principles for border enforcement of intellectual property in the EU, and the EU has agreed to adopt guidelines confirming the principles ―with a view to give greater and immediate legal certainty for producers and traders.‖ A key element of the Understanding is the core principle that “the mere fact that medicines are in transit through EU territory, and that there is a patent title applicable to such medicines in EU territory, does not in itself constitute enough grounds for customs authorities in any Member State to suspect that the medicines at stake infringe patent rights,” the Indian release said. If there is adequate evidence of a likely diversion of medicines into the EU market, then EU authorities can have grounds for suspicion of infringement of IP rights.*

**Research on Access to Effective Medicines:**

**Global pharmacovigilance for antiretroviral drugs: Overcoming contrasting priorities**

With increasing numbers of people worldwide on antiretroviral drugs, the need for improved and sustained global drug safety monitoring or pharmacovigilance is critical. Pharmacovigilance includes monitoring for substandard products, diversion, inappropriate use, and toxicity and is an essential component of safe and effective drug usage. The Forum for Collaborative HIV Research was asked to use its neutral setting for key stakeholders from the UN and government agencies, donors, industry, academia, multilateral organizations, and implanters to discuss the creation of a sustainable global pharmacovigilance system for ARVs. Important but contrasting priorities and values among stakeholders — all of whom are dedicated to establishing global pharmacovigilance — were identified as barriers to progress. [These included: 1) National sovereignty versus regional and international collaboration; 2) The value of pharmacovigilance versus the needs for care delivery; 3) Research, pharmacovigilance, and programmatic funding; 4) Active versus spontaneous surveillance; 5) Confidentiality of safety data versus need for transparency and public access; 6) Industry support versus global enforcement of reliable reporting; 7) Generic versus innovator antiretroviral manufacturers.] Recognition, understanding, and respect for these contrasts is a pathway for increased collaboration and cooperation that will lead to a sustainable system involving all stakeholders including industry and experienced regulatory agencies.*


**Global Health News:**

**Deal in place for inspecting foreign drugs**

More than 80 percent of the active ingredients for drugs sold in the United States are made abroad, mostly in a shadowy network of facilities in China and India that are rarely visited by government inspectors, who sometimes cannot even find the plants. But after decades of failed attempts, the federal government and the generic drug industry have reached an agreement that is almost certain to pass Congress and that will lead to routine inspections of these overseas plants, potentially transforming the enormous global medicine trade. Under the landmark agreement, expected to be completed within weeks, generic drug companies — which make 75 percent of the prescription medicines sold in the United States — would pay $299 million in annual fees to underwrite inspections of foreign manufacturing plants every two years, the same frequency required of domestic plants. Self-interest helped drive the agreement because the industry will not only get speedier approvals of new products as part of the deal but also may avoid scandals involving tainted medicines, which tend to hurt confidence in the entire industry.*

Malaria morbidity and pyrethroid resistance after the introduction of insecticide-treated bednets and artemisinin-based combination therapies: A longitudinal study

Substantial reductions in malaria have been reported in several African countries after distribution of insecticide-treated bednets and the use of artemisinin-based combination therapies (ACTs). [This paper conducted a longitudinal study of inhabitants of Dielmo village, Senegal, from January 2007 to December 2010, to assess the effect of these policies on malaria morbidity, mosquito populations, and asymptomatic infections in a west African rural population. It finds that there] were 464 clinical malaria attacks attributable to Plasmodium falciparum during 17 858 person-months of follow-up. The incidence density of malaria attacks averaged 5·45 (95% CI 4·90—6·05) per 100 person-months between January 2007, and July 2008, before the distribution of LLINs. Incidence density decreased to 0·41 (0·29—0·55) between August 2008, and August 2010, but increased back to 4·57 (3·54—5·82) between September and December 2010—ie, 27—30 months after the distribution of LLINs. The rebound of malaria attacks were highest in adults and children aged 10 years or older: 45 (63%) of 71 malaria attacks recorded in 2010 compared with 126 (33%) of 384 in 2007 and 2008 (p<0·0001). 37% of Anopheles gambiae mosquitoes were resistant to deltamethrin in 2010, and the prevalence of the Leu1014Phe kdr resistance mutation increased from 8% in 2007 to 48% in 2010 (p=0·0009). Increasing pyrethroid resistance of A gambiae and increasing susceptibility of older children and adults, probably due to decreasing immunity, caused the rebound and age shift of malaria morbidity. Strategies to address the problem of insecticide resistance and to mitigate its effects must be urgently defined and implemented.*


GLOBAL HEALTH NEWS:

Growing sense of hope at international Aids conference

There is still no [HIV/AIDS] vaccine on the horizon [...] but the news from recent studies that taking antiretroviral drugs protects people without HIV from infection and reduces the risk of people with HIV passing it to their partners has changed the landscape. Suddenly we are in a world where Aids is more preventable than ever before - and both prevention and treatment come pill-shaped. [...] There are practical difficulties in the way of getting the drugs to all who need them, but beyond the rhetoric and the big picture, there are organisations which are trying to find better ways forward. The Drugs for Neglected Diseases Initiative, for instance, [...] has decided to take on the needs of children with HIV. [...] Children are not small adults. They don't just need a few less tablets - they need drugs that can be given in doses suitable for their weight and may need syrups rather than pills. [...] And also on the drugs issue, Médecins Sans Frontières have been castigating the big pharma companies for slashing their Aids drug prices for the lowest-income countries, such as most of those in Africa, but refusing to allow the same sort of discount for middle-income countries.*

**Research on Global Action on Non-Communicable Diseases:**

**Major multinational food and beverage companies and informal sector contributions to global food consumption: Implications for nutrition policy**

In recent years, 10 major multinational food and beverage companies have worked together within the International Food and Beverage Alliance (IFBA) to increase their commitments to public health. Current IFBA commitments include initiatives to improve the nutrition quality of products and how these products are advertised to children. The impact and magnitude of IFBA member contributions to the total market share of packaged foods and beverages consumed remain incompletely understood, however. In order to evaluate this impact, [the authors] examined packaged food and soft drink company shares provided by Euromonitor, an international independent market analysis company. […] Worldwide, the top ten packaged food companies account for 15.2% of sales, with each individual company contributing less than 3.3%. The top ten soft drink companies account for 52.3% of sales worldwide; Coca-Cola and PepsiCo lead with 25.9% and 11.5% of sales, respectively. Although the top ten soft drink companies account for half of global sales, the top ten packaged food companies account for only a small proportion of market share with most individual companies contributing less than 3.3% each. Major multinational companies need to be joined by the myriad of small- and medium-sized enterprises in developing and implementing programs to improve the health of the public, globally. Without full participation of these companies, the impact of commitments made by IFBA members and other major multinational food and beverage companies will remain limited.*

*Source: Alexander, Eleanore, et al. 2011. Major multinational and beverage companies and informal sector contributions to global food consumption: implications for nutrition policy. Globalization and Health Vol. 7, No. 26 (1 August).*

---

**Global Health News:**

**Europe and US accused of stalling UN disease talks**

In the context of the preparation of the UN summit on non-communicable diseases (NCDs) to be held in September, a global health group on [18 August] accused the United States, Canada and Europe of harming efforts to fight cancer, diabetes, heart and other diseases because they will not agree to set United Nations targets. The main sticking point is money, said Ann Keeling, chair of the NCD Alliance, which groups some 2,000 health organizations from around the world focused on NCDs. Rich nations fear they will have to foot much of the bill for tackling a chronic disease epidemic in poorer nations, and are reluctant to commit to this when their economies are in turmoil, Keeling said. […] Non-communicable diseases, often known as chronic diseases, such as heart disease, cancer, diabetes, asthma and other lung and respiratory diseases are the leading cause of death worldwide each year, causing 36 million deaths in 2008 and accounting for 63 percent of all deaths. Experts say that over the next 20 years, this epidemic is projected to accelerate and that by 2030, the number of deaths from NCDs could reach 52 million a year. NCDs also account for half of all global disability, including blindness and amputations, and impose huge costs on families, healthcare systems, businesses and national economies. The U.N. meeting, slated for September 19 and 20 in New York, is only the second ever such high-level meeting to be convened on a threat to global health.*

*Source: Kelland, Kate. 2011. Europe and U.S. accused of stalling U.N. disease talks. Reuters online (18 August).*
The Health and Foreign Policy Bulletin is a monthly publication of the Norman Paterson School of International Affairs and the Centre for Trade Policy and Law. Its objective is to promote evidence based policy making by summarizing and disseminating the latest research on the intersection between global health and foreign policy. The Bulletin also identifies key events and developments of importance to policy makers. We are always looking for ways to improve the Health and Foreign Policy Bulletin and to expand its readership. If you have any suggestions or would like to subscribe, please contact us at hfp_bulletin@carleton.ca. The Bulletin is also available on the website of the Global Health Diplomacy Network (GHD-NET).

Summaries presented in the Bulletin are modified from original content.

*This summary has been adapted from original text, modifications may have included the addition and/or subtraction of text.

†This summary has been prepared using text from the body of the article, in addition to, or in lieu of the original abstract.

ISSN 1923-5739