Detecting and controlling foodborne infections in humans: Lessons for China from the United States experience

In the past 50 years, the United States has made major advances in human health surveillance, research and outbreak investigation that have helped reduce microbial contamination of food. In China, food safety has emerged as one of the country’s most prominent domestic concerns, but there has been limited investment in surveillance, inter-agency coordination, outbreak investigation and data synthesis. After large outbreaks of Salmonella in the 1960s and E. coli O157:H7 in the 1990s, the United States transformed its approach to detecting and investigating foodborne infections, including deployment of a national, laboratory-based surveillance system that uses molecular subtyping. In China, the absence of a national, laboratory-based surveillance system means that it is difficult to rapidly detect a widely dispersed foodborne infection outbreak or the emergence of new foodborne infections. Based on lessons learned in the United States, the authors propose fourteen policy and administrative changes that China can adopt to strengthen detection and control of foodborne infections. [These range from mandating government health insurance schemes that pay for diagnostic tests of public health significance, to conducting and publishing risk assessments that incorporate China-specific epidemiologic, microbiologic and environmental data.]*


GLOBAL HEALTH NEWS:

Scientists to pause research on deadly strain of bird flu

The scientists who altered a deadly flu virus to make it more contagious have agreed to suspend their research for 60 days to give other international experts time to discuss the work and determine how it can proceed without putting the world at risk of a potentially catastrophic pandemic. Suspensions of biomedical research are almost unheard of; the only other one in the United States was a moratorium from 1974 to 1976 on some types of recombinant DNA research, because of safety concerns. A letter explaining the flu decision is being published in two scientific journals, Science and Nature, which also plan to publish reports on the research, but in a redacted form, omitting details that would let other researchers copy the experiments. The letter is signed by the scientists who produced the new, more contagious form of the flu virus, as well as by more than 30 other leading flu researchers. […] The scientists say their work has important public health benefits, but they acknowledge that it has sparked intense public fears that the deadly virus could accidentally leak out of a laboratory, or be stolen by terrorists, and result in a devastating pandemic.*


RESEARCH ON HEALTH & STATES IN CRISIS/CONFLICT:

A comprehensive framework for human resources for health systems development in fragile and post-conflict states

[This article presents] a comprehensive and visible framework for human resource system development, known as the “House Model.” This model has been derived from the lessons learned in supporting human resource system development in three fragile and post-conflict health systems in Afghanistan, the Democratic Republic of Congo, and Cambodia. The efforts of development partners and the government typically concentrate on the “production” and training of health personnel, but this approach neglects other elements, such as deployment and retention, and the necessary linkages among these elements. While the “house model” contains elements similar to the World Health Organization HRH Action Framework, some functions are extracted in order to draw more attention to them. For example, the legal and regulatory framework, coordination, and monitoring are often neglected, and are integrated into this model. [The authors] highlight the core functions of human resource management (production-deployment-retention), separate the foundation components of HR management (policy and planning, finances, legal) and identify these foundation components as primarily the responsibility of the government.*

RESEARCH ON HUMAN RIGHTS & GLOBAL HEALTH:

Induced abortion: Incidence and trends worldwide from 1995 to 2008

[This article uses] linear regression models to explore the association of the legal status of abortion with the abortion rate across subregions of the world in 2008. The global abortion rate was stable between 2003 and 2008, with rates of 29 and 28 abortions per 1000 women aged 15—44 years, respectively, following a period of decline from 35 abortions per 1000 women in 1995. The average annual percent change in the rate was nearly 2.4% between 1995 and 2003 and 0.3% between 2003 and 2008. Worldwide, 49% of abortions were unsafe in 2008, compared to 44% in 1995. About one in five pregnancies ended in abortion in 2008. The abortion rate was lower in subregions where more women live under liberal abortion laws (p<0.05). [These findings suggest that] restrictive abortion laws are not associated with lower abortion rates. Measures to reduce the incidence of unintended pregnancy and unsafe abortion, including investments in family planning services and safe abortion care, are crucial steps toward achieving the Millennium Development Goals.*


GLOBAL HEALTH NEWS:

Undercounting, overcounting and the longevity of flawed estimates: Statistics on sexual violence in conflict

Although international donor organizations and research institutes have become more engaged in research on sexual violence over the past decade, there is a need for higher standards, more funding, and better data. As a start, sexual violence modules should be included in existing large-scale population-based surveys such as the Demographic and Health Survey (DHS) during or immediately after conflict. Although a leading source of data on sexual violence, not all DHSs include questions on violence against women and, while surveys are implemented regularly at 4–5 year intervals in many developing countries, they often do not coincide with dates of civil unrest. [...] Furthermore, panel data must be collected to assess trends in violence and to enable researchers to conduct more sophisticated analyses. Programme evaluations (especially randomized control trials) must be undertaken to better inform policies and design of preventative and curative interventions. Both quantitative and qualitative studies should be used, and no one study should ever be viewed as the definitive answer on a policy solution or as the true estimate of sexual violence in a population.*


GLOBAL HEALTH NEWS:

Healthy by law: The missed opportunity to use law for public health

Nature’s laws are hard to discover and are eternal whether or not they suit humanity; people’s laws are easily written and can be changed at anytime to suit humanity better. So why is it that the public health community, which expends much effort and expense probing natural laws, places negligible emphasis on the collection, analysis, and making greater use of the world’s public health laws? Laws are arguably the ultimate public good for health; without laws, the health professions would not be licensed, public health systems would be rudimentary, many medical and consumer products would be unsafe, the natural environment would be insanitary, social benefits would be arbitrary, and physical violence against people would be unpunished. Yet laws are not always a force for good; bad laws may institutionalise social disadvantage in ways that damage health, or organise health systems in ways that sap their performance. Identification of the laws that are most beneficial to health and globalisation of knowledge of them is, therefore, an intervention from which all countries could benefit.*

GLOBAL HEALTH GOVERNANCE

What is ‘global health diplomacy’? A conceptual review

Global Health Diplomacy [GHD] has eluded definitional precision. While there is broad consensus that negotiation is at its heart, normatively-driven views about whether GHD is intended to serve foreign policy or health goals adds to this analytical challenge. Understanding GHD in terms of “new diplomacy” offers a way forward. First, GHD’s subject matter focuses on population health within a global context. [...] Second, GHD is characterised by diverse actors spanning the state and non-state, public and private, health and non-health sectors, and local to global levels of governance. [...] Third, GHD is shaped by different processes of interaction. [...] Together, these elements form a more concise definition of GHD as “policy-shaping processes through which state, non-state and other institutional actors negotiate responses to health challenges, or utilise health concepts or mechanisms in policy-shaping and negotiation strategies, to achieve other political, economic or social objectives.” [...] From this starting point, a focused research agenda emerges, not only to strengthen understanding of health negotiations within a global context, the role of diverse actors, and the new processes by which such actors interact, but how GHD might contribute practically to achieving more effective collective action.†


GLOBAL HEALTH NEWS:

Action to preserve WHO’S core functions cannot wait for organisational reform

While WHO undergoes a wide-ranging reform sparked by a US$300 million budget shortfall, the agency is facing an exodus of qualified staff that is affecting its ability to work. [...] Oxfam is especially concerned that inadequate funding will severely diminish the WHO Essential Medicines Department, which for more than three decades has had an indispensable role in enabling developing countries to access affordable medicines. A key cause of WHO's financial predicament is its declining budget, exacerbated by the adverse exchange rate of the Swiss franc against the US dollar. Money to pay for salaries and management, as well as for its vitally important core functions, has diminished while voluntary funding for projects has increased. Thus the basic costs are squeezed while specific, often vertical, activities that might be limited to a number of countries only are supported. The planned reforms will take time—2015 is the estimated endpoint for achieving financial stability. In the interim, continued staff losses will put at risk essential WHO functions that support public health, such as the global norms, guidelines, and standards produced through the expert committees and similar bodies. The Medicines Department, although not the only unit under threat, is a sobering illustration of the consequences of failing to protect core functions of the organisation.*


Towards universal health coverage: The role of within-country wealth-related inequality in 28 countries in sub-Saharan Africa

[This article measures] within-country wealth-related inequality in the health service coverage gap of maternal and child health indicators in sub-Saharan Africa and quantifies its contribution to the national health service coverage gap. Coverage data for child and maternal health services in 28 sub-Saharan African countries were obtained from the 2000–2008 Demographic Health Surveys. In 26 countries, within-country wealth-related inequality accounted for more than one quarter of the national overall coverage gap. Reducing such inequality could lower this gap by 16% to 56%, depending on the country. Regarding select individual health service indicators, wealth-related inequality was more common in services such as skilled birth attendance and antenatal care, and less so in family planning, measles immunization, receipt of a third dose of vaccine against diphtheria, pertussis and tetanus and treatment of acute respiratory infections in children under 5 years of age. The contribution of wealth-related inequality to the child and maternal health service coverage gap differs by country and type of health service, warranting case-specific interventions. Targeted policies are most appropriate where high within-country wealth-related inequality exists, and whole-population approaches, where the health-service coverage gap is high in all quintiles.*


Effective aid in a complex environment

The 4th High Level Forum on Aid Effectiveness (which took place from 29 November to 1 December 2011 in Busan, Republic of Korea – see article below), convened an expanding network of global development actors to re-examine aid effectiveness. This review of global progress included examining the breadth of aid partnerships, processes and progress on the United Nations Millennium Development Goals and the principles that are integral to their achievement. Five years after the Paris Principles on aid effectiveness [...] were established, only one of 13 targets – coordinated technical cooperation – has been met. However, positive progress has been made: 86% of aid is now fully untied to any procurement agreement (against an 89% target), and use of local public financial management systems is approaching the target of 55%. While the Paris Declaration permeates development rhetoric, donor implementation of its targets has been “highly uneven”. Donors continue to laud harmonization but maintain parallel funding, and claim that they are working towards alignment while implementing “transitional mechanisms” that hamper the development of partner systems. Donors delay transferring to local ownership to reduce their own risk and preserve leverage, thus allowing corruption, ineffectual systems and project perks to continue unchallenged. These must be high among the “policies that present obstacles to development results” that the forum in Busan will commit to eliminate.*

RESEARCH ON HUMAN RESOURCES & MIGRATION OF HEALTH WORKERS:

The impact of out-migration on the nursing workforce in Kenya

This study analyzed nursing data from the Kenya Health Workforce Informatics System, collected by the Nursing Council of Kenya and the Department of Nursing in the Ministry of Medical Services to examine the impact of out-migration on Kenya's nursing workforce. [The authors] analyzed trends in Kenya's nursing workforce from 1999 to 2007, including supply, deployment, and intent to out-migrate, measured by requests for verification of credentials from destination countries. From 1999 to 2007, 6 percent of Kenya's nursing workforce of 41,367 nurses applied to out-migrate. Eighty-five percent of applicants were registered or B.Sc.N. prepared nurses, 49 percent applied within 10 years of their initial registration as a nurse, and 82 percent of first-time applications were for the United States or United Kingdom. For every 4.5 nurses that Kenya adds to its nursing workforce through training, 1 nurse from the workforce applies to out-migrate, potentially reducing by 22 percent Kenya's ability to increase its nursing workforce through training. Nurse out-migration depletes Kenya's nursing workforce of its most highly educated nurses, reduces the percentage of younger nurses in an aging nursing stock, decreases Kenya's ability to increase its nursing workforce through training, and represents a substantial economic loss to the country.*


GLOBAL HEALTH NEWS:

Busan Partnership Agreement for Effective Development Cooperation adopted

From 29 November to 1 December 2011 the High Level Forum on Aid Effectiveness (HLF-4) in Busan, South Korea gathered over 3000 international delegates who met to review the aid effectiveness agenda set up at the previous meetings in Rome (2002), Paris (2005) and Accra (2008). After extended negotiations, 18 sherpas elected to represent a wide group of stakeholders reached agreement on the Busan Partnership for Effective Development Cooperation. This declaration for the first time establishes an agreed framework for development cooperation that embraces traditional donors, South-South cooperators, the emerging donors Brazil, Russia, India, China and South Africa (BRICS), CSOs and private funders. This marks a turning point for international development cooperation. The process has been guided by the Working Party on Aid Effectiveness (WP-EFF), which brings together representatives of over 80 countries and organisations. Five fundamental principles have been set out to make aid more effective: ownership (developing countries are responsible for their development strategies), alignment (donor countries align to these strategies), harmonization (donor countries coordinate and simply aid procedures), results, and mutual accountability. The level of aid at stake has been estimated by the OECD to be $129 billion a year, a figure which does not include money from private foundations or countries like China.*

RESEARCH ON TRADE POLICY & HEALTH:

Trends in compulsory licensing of pharmaceuticals since the DOHA Declaration: A database analysis

It is now a decade since the World Trade Organization (WTO) adopted the “Declaration on the TRIPS Agreement and Public Health” at its 4th Ministerial Conference in Doha. Many anticipated that these actions would lead nations to claim compulsory licenses (CLs) for pharmaceutical products with greater regularity. [...] A number of countries are already working to incorporate the Code into national law and practice. For example, Kenya has entered into bilateral agreements with certain countries [...] regarding collaborative health workforce training and promotion of circular migration of health workers [...]. In a draft national policy currently awaiting parliamentary approval, Zimbabwe addresses factors contributing to health workforce shortages; supports mechanisms and processes for stakeholder coordination and collaboration; and defines stakeholders’ roles and responsibilities in ensuring timely financing, implementation, and monitoring of national human resources for health and in promoting the development and retention of the health workforce. Thailand has organized a national subcommission on the Code’s implementation and has created a 3-year plan of action, which includes translating the Code into Thai, convening multistakeholder consultations, and establishing practice guidelines and a registration system for recruiters. Among high-income countries, Norway has begun implementing the Code by scaling up the education of relevant personnel to ensure sustainability of its own health care system, and it has formally stopped recruiting health personnel from countries facing critical shortages in the health workforce. [...] The United States, led by the Office of Global Affairs and the Health Resources and Services Administration, has convened an interagency working group on implementing the Code, which has begun collaborating on the U.S. government response to the Code’s reporting provisions and raising awareness of its adoption.*†

**Global Health News:**

**South Korea lifts Canadian beef ban**

The almost decade long beef trade dispute between Canada and South Korea appears close to its conclusion after Seoul announced it would immediately open its borders to Canadian beef from cattle under 30 months old. The 20 January announcement follows the temporary suspension of a related WTO dispute in summer 2011 that had meant to facilitate a negotiated solution among the two countries. South Korea’s ban dates back to 2003 when the Asian country, along with other nations, shut its borders to all Canadian and US beef products, responding to North American producers being linked to the BSE, or mad cow disease. [...] In 2002, Canada exported over US$40 million in beef products to South Korea, making it the fourth-largest market for Canadian beef at the time. Reopening the Asian market is considered essential to bring Canadian beef production back to 2002 numbers. [...] South Korea, where the public is particularly sensitive for food safety, had long been reluctant to ease the ban. [...] Only in 2009, after Canada initiated a WTO dispute on the matter South Korea was ready to discuss an easing of the ban. Canada, contending that there was no scientific evidence to justify South Korea’s persistence in maintaining the ban, cited violations of the WTO’s Sanitary and Phytosanitary Measures Agreement - which governs rules pertaining to food safety - as justification for a panel to investigate South Korean barriers to trade.*†


**Research on Access to Effective Medicines:**

**Advance market commitment for pneumococcal vaccines: Putting theory into practice**

An Advance Market Commitment (AMC) for vaccines aims to make the market for vaccines in developing countries more attractive through a legally binding commitment to purchase vaccines according to predetermined terms. As some of the risks are removed, the vaccine industry is encouraged to increase investments to stimulate the development and manufacture of target products. [...] The AMC pilot for pneumococcal vaccines provides insights for products in a similar market. In this case, [it shows] that there are trade-offs between the objectives of ensuring sufficient manufacturing capacity to serve imminent demand and establishing a competitive market in the long term. Yet, this AMC tells us little as to whether the mechanism would effectively work to encourage commercial investments in research and development for new vaccines in early stages of development or whether a similar model can be applied to other types of pharmaceutical products. It is likely that an AMC is more easily established in markets where a single entity is in charge of pooling and purchasing large volumes of demand for a predefined set of countries and is thus able to make a credible commitment.**†


**Global Health News:**

**The primacy of public health consideration in defining poor quality medicines**

Poor quality essential medicines, both substandard and counterfeit, are serious but neglected public health problems. Anti-infective medicines are particularly afflicted. Unfortunately, attempts to improve medicine quality have been hampered by confusion and controversy over definitions. For counterfeit (or falsified) medicines, this has arisen from perceived differences between public health and intellectual property approaches to the problem. [The authors] argue that public health, and not intellectual property or trade issues, should be the prime consideration in defining and combating counterfeit medicines, and that the World Health Organization (WHO) should be encouraged and supported to take a more prominent role in improving the world’s medicine quality and supply. An international treaty on medicine quality, under WHO auspices, could be an important step forward in the struggle against both substandard and counterfeit (or falsified) medicines.*

RESEARCH ON RESPONSE TO HIV/AIDS, TUBERCULOSIS & MALARIA:
Circus monkeys or change agents? Civil society advocacy for HIV/AIDS in adverse policy environments

This paper explores the factors enabling and undermining civil society efforts to advocate for policy reforms relating to HIV/AIDS and illicit drugs in three countries in Eastern Europe and Central Asia: Georgia, Kyrgyzstan and Ukraine. It examines how political contexts and civil society actors’ strengths and weaknesses inhibit or enable advocacy for policy change [...]. The study is based on in-depth interviews with representatives of civil society organizations (CSOs) (n = 49) and national level informants including government and development partners (n = 22). [The authors’] policy analysis identified a culture of fear derived from concerns for personal safety but also risk of losing donor largesse. Relations between CSOs and government were often acrimonious rather than synergistic, and while [the authors] found some evidence of CSO collective action, competition for external funding – in particular for HIV/AIDS grants from the Global Fund to Fight AIDS, Tuberculosis and Malaria was often divisive. Development partners and government tend to construct CSOs as service providers rather than advocates. While some advocacy was tolerated by governments, CSO participation in the policy process was, ultimately, perceived to be tokenistic. This was because there are financial interests in maintaining prohibitionist legislation: efforts to change punitive laws directed at the behaviors of minority groups such as injecting drug users have had limited impact.*


GLOBAL HEALTH NEWS:

India reports case of totally drug-resistant tuberculosis

Researchers in Mumbai have identified 12 patients with a virulent strain of tuberculosis that seems to be resistant to all known treatments. The cases of so-called totally drug-resistant tuberculosis (TDR-TB) have been detected in the city in the past 3 months. Worldwide, the only other episodes of TDR-TB reported were in Iran in 2009 and Italy in 2007. [...] Government health officials attribute the problems with drug-resistant tuberculosis to the city’s unregulated private doctors who prescribe inappropriate drugs. Privately, some senior officials acknowledge that much of the public have a negative perception of government-run health facilities, due to long waiting periods, rude treatment, and the stigma associated with tuberculosis. The result is that many infected people avoid the government tuberculosis programme and seek relief from private doctors, only some of whom have medical training. The government says that it is considering regulating tuberculosis drugs, but it has not yet taken action.*

Global nutrition and the pandemic of obesity in developing countries

Decades ago, discussion of an impending global pandemic of obesity was thought of as heresy. But in the 1970s, diets began to shift towards increased reliance upon processed foods, increased away-from-home food intake, and increased use of edible oils and sugar-sweetened beverages. Reductions in physical activity and increases in sedentary behavior began to be seen as well. The negative effects of these changes began to be recognized in the early 1990s, primarily in low- and middle-income populations, but they did not become clearly acknowledged until diabetes, hypertension, and obesity began to dominate the globe. Now, rapid increases in the rates of obesity and overweight are widely documented, from urban and rural areas in the poorest countries of sub-Saharan Africa and South Asia to populations in countries with higher income levels. Concurrent rapid shifts in diet and activity are well documented as well. An array of large-scale programmatic and policy measures are being explored in a few countries; however, few countries are engaged in serious efforts to prevent the serious dietary challenges being faced.


Regulating the commercial promotion of food to children: A survey of actions worldwide

[This paper describes] the global regulatory environment around food marketing to children in 2009 and identifies changes in this environment since 2006. Informants able to provide information on national controls on marketing to children were identified and sent a standardised template for data collection, developed and refined through iterative use with informants. [...] The policy environment was described in the 27 member states of the European Union, and in a further 32 countries. Of these 59 countries, 26 have made explicit statements on food marketing to children in strategy documents, and 20 have, or are developing, explicit policies in the form of statutory measures, official guidelines or approved forms of self-regulation. These figures reflect a change in the policy environment since 2006. Although there is still resistance to change, there has been significant movement towards greater restriction on promotional marketing to children, achieved through a variety of means. Government-approved forms of self-regulation have been the dominant response, but statutory measures are increasingly being adopted. The nature and degree of the restrictions differ considerably, with significant implications for policy impact. In many cases the policy objectives remain poorly articulated, resulting in difficulty in formulating indicators to monitor and assess impact. To address food marketing to children, governments need to develop clearer statements of the objectives to be achieved, define the indicators that can demonstrate this achievement, and require the relevant stakeholders to account for the progress being made.*

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).

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