As a drug class, GLP-1 receptor agonists improve glycaemia by stimulating insulin secretion and the inhibition of glucagon release, but only when glucose concentrations are raised, thus conferring a lower risk of hypoglycaemia than that noted with sulphonylureas.[9–11] Moreover, exenatide twice daily reduces postprandial glucose excursions by delaying gastric emptying.[10,11] GLP-1 receptor agonists induce weight loss in most patients, but are associated with gastrointestinal side-effects[9–11] and have been linked to pancreatitis, although with conflicting conclusions from the clinical controlled trials and use of different databases.[12] These drugs display cardioprotection and reduce blood pressure and markers of inflammation, but increase heart rates.[12] Analyses of phase 2 and phase 3 trials with exenatide twice daily versus placebo or insulin showed no evidence of cardiovascular harm with exenatide. Additionally, a retrospective analysis[13,14] of cardiovascular events using the LifeLink database from 2005 to 2009 showed that patients given exenatide twice daily were significantly less likely to have a cardiovascular event (p=0·01) or cardiovascular-related hospital admission (p=0·02) than were those given other glucose-lowering drugs.

After the lesson learned from rosiglitazone,[15] the US Food and Drug Administration now requires the assessment of cardiovascular risks of new diabetic drugs both before and after approval, and results of cardiovascular outcome studies for the different GLP-1 receptor agonists are expected after 2015.

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An authority for crisis coordination and accountability

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The demand for better coordination and control is heard during and after every major international disaster. We now have the potential framework to meet this demand and we should respond. The World Health Assembly altered WHO's role in disasters after the outbreak of severe acute respiratory syndrome with the 2005 International Health Regulations (IHR) Treaty.[1] WHO changed from a mainly passive responder during short-term infectious disease crises to an unprecedented active authority with a mandate to address long-term prevention, preparedness, and response roles and responsibilities. This treaty obliges WHO to obtain expert advice on any declared public health emergency of international concern.

Additionally, National Focal Points should be identified to ensure a two-way channel of communication between WHO and its 194 member states, and countries are required to establish surveillance capacities and to share information relevant to public health risks. Finally, the treaty introduced a decision-instrument algorithm for the assessment and notification of events that might constitute a public health emergency of international concern. Although the IHR Treaty created political tensions because of the balance between sovereignty and trade concerns of individual nation states and the common good of the international community, it was eventually agreed on and adopted by all countries.[1] The scope and timeliness of the implementation process proved to be a major accomplishment and complemented the existing role of WHO's Health Action in Crises Cluster, which addressed increasingly wide and weighty international health emergencies.

Undeniably, many nations still do not have the core capacities to detect, assess, and report risks, and the IHR Treaty is unable to enforce sanctions. Yet under the authority of the treaty, the response to H1N1 influenza was effective.[1] Timely virus detection was achieved by the Global Influenza Surveillance Network, and resulted in effective partnering, interagency coordination, and rapid field deployment of experts and public health professionals. The development of first-candidate vaccine-seed strains and control reagents was achieved in a timely manner, as were early recommendations from a vulnerable-group analysis of surveillance data and the distribution of proper treatment courses to 72 countries. The IHR Review Committee admitted to some bureaucratic hiccups in May, 2011, but strongly supported an even larger increase in the number of fielded experts and in accelerated surveillance cooperation to help meet the 2012 core-capacity goals.[1] Few could dispute that the treaty had functioned exactly as expected from a worldwide authority designed to mitigate the dire results of a threatening pandemic through international cooperation.

Reuters

Distribution of water after earthquake in Haiti, Jan 22, 2010

The success of the IHR Treaty now opens the door of potential international cooperation wider and begs a larger question for the humanitarian community: can a similar model be introduced to guarantee the coordination of large-scale disasters and crises? Such a cooperative model is crucial to the provision of oversight, accountability, accreditation, and worldwide legitimacy that has been hitherto absent, which was painfully evident in the chaotic health response to the Haiti earthquake[2] and to many previous major crises. Arguably, the treaty has to mature further and be broadened to encompass more than its exclusively epidemiological oversight to remain relevant: it should be incorporated into an agency with appropriate managerial skills and authorities to advance the positive aspects of the current humanitarian cluster model and universal standards of care.[3]

Historically, the first attempt at a broader mandated authority was addressed by the former UN Department of Humanitarian Affairs. This body was stripped of its short-lived operational responsibilities to avoid being seen as a competitor to UN field agencies and non-governmental organisations, and summarily disappeared in 1997 to become the Office for the Coordination of Humanitarian Affairs (OCHA). OCHA has many excellent disaster managers, but unfortunately has always been under-resourced, underfunded, and unable to compete with the dominant, often military-led resources and contractors who generally respond to health disasters. OCHA does not have the international power required of any authority like the IHR Treaty that is necessary for the reform of the UN Cluster System[2] and in crises with major health effects.[4]

In view of the present movement toward a "blueprint for professionalizing humanitarian assistance"[5] and

92% of humanitarians willing to be professionalised[6] under a set of core competencies,[7] the subject of an international authority should be urgently readdressed. Such an authority is needed to: guarantee a stable and strategic return to root-cause remediation and development; introduce universal standards at every level of response, prevention, and preparedness for the inevitable direct and indirect results that cause and compound catastrophic public health emergencies; and endorse a process for the accreditation and accountability of providers. Despite the enormous implications and challenges to general public health practice and policy worldwide, the need for this authority can no longer be rationally questioned or ethically denied. The encouragement of the IHR Treaty initiative and the demands of health generally should embolden that resolve.

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