

Vaccines and Global Health: The Week in Review 13 February 2016 Center for Vaccine Ethics & Policy (CVEP)

This weekly digest targets news, events, announcements, articles and research in the vaccine and global health ethics and policy space and is aggregated from key governmental, NGO, international organization and industry sources, key peer-reviewed journals, and other media channels. This summary proceeds from the broad base of themes and issues monitored by the Center for Vaccine Ethics & Policy in its work: it is not intended to be exhaustive in its coverage.

Vaccines and Global Health: The Week in Review is also **posted in pdf form** and as a set of blog posts at http://centerforvaccineethicsandpolicy.wordpress.com/. This blog allows full-text searching of over 8,000 entries.

Comments and suggestions should be directed to

David R. Curry, MS

Editor and

Executive Director

Center for Vaccine Ethics & Policy

david.r.curry@centerforvaccineethicsandpolicy.org

Request an email version: Vaccines and Global Health: The Week in Review is published as a single email summary, scheduled for release each Saturday evening before midnight (EDT in the U.S.). If you would like to receive the email version, please send your request to david.r.curry@centerforvaccineethicsandpolicy.org.

Contents [click on link below to move to associated content] Zika/WHO Executive Board

A. Zika; Ebola/EVD; Polio; MERS-Cov

B. WHO; CDC

C. Announcements/Milestones/Perspectives

D. Reports/Research/Analysis

E. Journal Watch

F. Media Watch

::::::

Statement on Data Sharing in Public Health Emergencies

The arguments for sharing data, and the consequences of not doing so, have been thrown into stark relief by the Ebola and Zika outbreaks.

In the context of a public health emergency of international concern, there is an imperative on all parties to make any information available that might have value in combatting the crisis.

We are committed to working in partnership to ensure that the global response to public health emergencies is informed by the best available research evidence and data, as such: :: Journal signatories will make all content concerning the Zika virus free to access. Any data or preprint deposited for unrestricted dissemination ahead of submission of any paper will not preempt its publication in these journals.

:: Funder signatories will require researchers undertaking work relevant to public health emergencies to set in place mechanisms to share quality-assured interim and final data as rapidly and widely as possible, including with public health and research communities and the World Health Organisation.

We urge other organisations to make the same commitments. This commitment is in line with the consensus statement agreed at a WHO expert consultation on data sharing last year whereby researchers are expected to share data at the earliest opportunity, once they are adequately controlled for release and subject to any safeguards required to protect research participants and patients.

Signatories to the Statement

Academy of Medical Sciences, UK

Bill and Melinda Gates Foundation

Biotechnology and Biological Sciences Research Council (BBSRC)

The British Medical Journal (BMJ)

Bulletin of the World Health Organization

Canadian Institutes of Health Research

The Centers for Disease Control and Prevention

Chinese Academy of Sciences

Chinese Centre for Disease Control and Prevention

The Department of Biotechnology, Government of India

The Department for International Development (DFID)

Deutsche Forschungsgemeinschaft (DFG)

eLife

The Economic and Social Research Council (ESRC)

F1000

Fondation Mérieux

Fundação Oswaldo Cruz (Fiocruz)

The Institut Pasteur

Japan Agency for Medical Research and Development (AMED)

The JAMA Network

The Lancet

Médecins Sans Frontières/Doctors Without Borders (MSF)

National Academy of Medicine

National Institutes of Health, USA

National Science Foundation, USA

The New England Journal of Medicine (NEJM)

PLOS

Science Journals

South African Medical Research Council

Springer Nature

UK Medical Research Council

Wellcome Trust

ZonMw - The Netherlands Organisation for Health Research and Development

::::::

Zika virus [to 13 February 2016]

Public Health Emergency of International Concern (PHEIC)

http://www.who.int/emergencies/zika-virus/en/

Situation report: Zika and potential complications - 12 February 2016

http://www.who.int/emergencies/zika-virus/situation-report/en/

- :: WHO has called for a coordinated and multisectoral response through an inter-agency Strategic Response Framework focusing on response, surveillance and research.
- :: 39 countries have reported locally acquired circulation of the virus since January 2007. Geographical distribution of the virus has steadily expanded.
- :: Six countries (Brazil, French Polynesia, El Salvador, Venezuela, Colombia and Suriname) have reported an increase in the incidence of cases of microcephaly and/or Guillain-Barré syndrome (GBS) in conjunction with an outbreak of the Zika virus. Puerto Rico and Martinique have reported cases of GBS associated with Zika virus infection without an increase of incidence. No scientific evidence to date confirms a link between Zika virus and microcephaly or GBS.
- :: Women's reproductive health has been thrust into the limelight with the spread of the Zika virus. The latest evidence suggests that Zika virus infection during pregnancy may be linked to microcephaly in newborn babies.
- :: WHO advice on travel to Zika-affected countries includes advice for pregnant women as well as women who are trying to become pregnant and their sexual partners.

 Read the full situation report

Zika Open

[Bulletin of the World Health Organization] EDITORIAL

Data sharing in public health emergencies: a call to researchers

- Christopher Dye, Kidist Bartolomeos, Vasee Moorthy, Marie Paule Kieny Posted: 4 February 2016 http://dx.doi.org/10.2471/BLT.16.170860

...The deficiencies with existing data-sharing mechanisms, which were highlighted during the 2013–16 Ebola epidemic in west Africa, have brought the question of data access to the forefront of the global health agenda. In September 2015, agreement was reached on the need for open sharing of data and results, especially in public health emergencies. Subsequently, following published expressions of support by its members, the International Committee of Medical Journal Editors (ICMJE) have explicitly confirmed that pre-publication dissemination of information critical to public health will not prejudice journal publication in the context of a public health emergency declared by WHO. While efforts so far have focused on results from clinical trials, and on making full accompanying data sets available at the time of publication, there are further opportunities to expand access to information from observational studies, operational research, routine surveillance and the monitoring of disease control programmes.

To improve timely access to data in the context of a public health emergency, the Bulletin of the World Health Organization will implement a new data sharing and reporting protocol. The protocol is established specifically to address the data gap that exists in responding to the current Zika virus epidemic and, in the first instance, will apply only to articles submitted in the context of this outbreak...

...Given the number and complexity of unanswered questions on the mechanisms and consequences of Zika infection and associated disease, our goal is to encourage all researchers to share their data as quickly and widely as possible. With this protocol for immediate online posting, we are providing another means to achieve immediate global access to relevant data. Researchers can thus share their data while meeting their need to retain authorship, achieve precedence, and put their research on public record. We are pleased to announce that the first paper to which this protocol applies is now available online. 7

:: New Papers available here

WHO involvement in Zika R&D

8 February 2016

WHO is currently mapping existing R&D for Zika in order to prioritize medical products and approaches that should be fast-tracked into development. These will be reviewed by expert advisory committees as soon as possible. As of today, most research that could be useful for Zika has been carried out on other flaviviruses – such as dengue or yellow fever.

Diagnostics are a top urgency in order to ascertain the presence of the Zika virus as opposed to other similar diseases caused by flaviviruses with mosquito vectors. Very few test are available. A call to interested companies and other groups was issued on 5 February to submit potential products to the WHO 'Emergency Assessment and Listing' procedure. This procedure, once a product has been accepted, guarantees acceptable levels of quality and performance and allows UN agencies, NGOs and countries to procure the product with confidence.

There are at least 12 groups working on Zika vaccines; all are in the early stages of development and availability of licensed products could take a few years.

Some studies are being carried out on prophylactic therapeutics that would work in the same way as prophylaxis for malaria. Fogging followed by the controlled release of genetically modified mosquitoes may be worth considering for halting the spread of Zika.

WHO is also working on:

- :: Establishing regulatory support networks to fast-track approval of clinical trials in countries
- :: Advocacy on timely samples and data sharing among groups undertaking R&D studies on Zika, to ensure the best science is brought to bear on research and development.

WHO's R&D efforts on Zika are part of the overall work on a roadmap – the R&D Blueprint - for better R&D preparedness based on the experience of the R&D work carried out during the West-Africa Ebola outbreak. The roadmap will enable roll-out of an emergency R&D response as early and as efficiently as possible for emerging diseases for which there are no, or few, countermeasures. In December 2015, WHO held a consultation to identify a short-list of pathogens to be prioritized immediately for R&D preparedness. Zika was identified as a serious risk, needing further action as soon as possible.

WHO: <u>Disease Outbreak News (DONs)</u> [Zika]

- :: 12 February 2016 Zika virus infection United States of America
- :: 12 February 2016 Microcephaly United States of America
- :: 12 February 2016 Guillain-Barré syndrome Colombia and Venezuela
- :: 8 February 2016 Guillain-Barré syndrome Brazil
- :: <u>8 February 2016</u> Guillain-Barré syndrome France Martinique
- :: 8 February 2016 Zika virus infection Maldives
- :: 8 February 2016 Zika virus infection Region of the Americas

WHO: Women in the context of microcephaly and Zika virus disease

Online Q&A

10 February 2016

The risk of babies born with microcephaly has raised understandable concerns among women including those who are pregnant or planning to become pregnant. There are many unknowns regarding the possible causes of microcephaly. Until we have more answers, there are ways that women can protect themselves from Zika infection.

CDC/ACIP [to 13 February 2016]

http://www.cdc.gov/media/index.html

http://www.cdc.gov/vaccines/acip/

MONDAY, FEBRUARY 8, 2016

<u>CDC Emergency Operations Center moves to highest level of activation for Zika response</u>

To further enhance its response to the Zika virus outbreak, CDC's <u>Emergency Operations</u> <u>Center</u> is moving to a Level 1 activation—reflecting the agency's assessment of the need for an accelerated preparedness to bring together experts to focus intently and work efficiently in anticipation of local Zika virus transmission by mosquitoes in the Continental U.S...

IOM

Research Priorities to Inform Public Health and Medical Practice for Domestic Zika Virus: A Workshop

February 16, 2016 (8:30 AM EST/US)

Open Meeting

Agenda Register Webcast

Activity Description

At the request of the U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary of Preparedness and Response (ASPR), the National Academies of Sciences, Engineering, and Medicine will host a one-day public workshop on February 16, 2016 to explore potential research priorities arising as a result of the emergence of Zika virus in the United States...

...There is an urgent need for additional research to better characterize the Zika virus, especially those issues related to means of transmission and infection during pregnancy. Additional epidemiologic, entomologic, and virology research of the Zika virus under real-world

conditions could provide a more robust evidence base to inform medical and public health efforts to protect those at-risk. Such research could also provide much needed answers to questions about health risks and appropriate public health and medical interventions.

This workshop will bring together key stakeholders and experts to discuss the research priorities needed to inform medical and public health practice that can be implemented under real world conditions to better understand the true risk that Zika virus poses to the public in the U.S. and adequate prevention efforts and interventions to mitigate that risk.

The White House [U.S.] [to 13 February 2016]

https://www.whitehouse.gov/briefing-room/statements-and-releases

Selected Statements and Releases

FACT SHEET: Preparing for and Responding to the Zika Virus at Home and Abroad February 08, 2016

Since late last year, the Administration has been aggressively working to combat Zika, a virus primarily spread by mosquitoes that has recently been linked to birth defects and other concerning health outcomes. The Federal Government has been monitoring the Zika virus and working with our domestic and international public health partners to alert healthcare providers and the public about Zika; provide public health laboratories with diagnostic tests; and detect and report cases both domestically and internationally.

The Administration is taking every appropriate measure to protect the American people, and today announced that it is asking Congress for more than \$1.8 billion in emergency funding to enhance our ongoing efforts to prepare for and respond to the Zika virus, both domestically and internationally. The Administration will submit a formal request to Congress shortly... ...The requested resources will build on our ongoing preparedness efforts and will support essential strategies to combat this virus, such as rapidly expanding mosquito control programs; accelerating vaccine research and diagnostic development; enabling the testing and procurement of vaccines and diagnostics; educating health care providers, pregnant women and their partners; improving epidemiology and expanding laboratory and diagnostic testing capacity; improving health services and supports for low-income pregnant women, and enhancing the ability of Zika-affected countries to better combat mosquitoes and control transmission...

[Funding request excerpts; Editor's text bolding]

Department of Health and Human Services - \$1.48 billion

Centers for Disease Control and Prevention - \$828 million. The request includes funding to support prevention and response strategies through the following activities:

- :: Support Zika virus readiness and response capacity in States and territories with mosquito populations that are known to transmit Zika virus, with a priority focus on areas with ongoing Zika transmission;
- :: Enhance mosquito control programs through enhanced laboratory, epidemiology and surveillance capacity in at-risk areas to reduce the opportunities for Zika transmission;
- :: Establish rapid response teams to limit potential clusters of Zika virus in the United States;
- :: Improve laboratory capacity and infrastructure to test for Zika virus and other infectious diseases;
- :: Implement surveillance efforts to track Zika virus in communities and in mosquitoes;

- :: Deploy targeted prevention and education strategies with key populations, including pregnant women, their partners, and health care professionals;
- :: Expand the CDC Pregnancy Risk Assessment Monitoring System, improve Guillain Barré syndrome tracking, and ensure the ability of birth defect registries across the country to detect risks related to Zika;
- :: Increase research into the link between Zika virus infections and the birth defect microcephaly and measure changes in incidence rates over time;
- :: Enhance international capacity for virus surveillance, expand the Field Epidemiology Training program, laboratory testing, health care provider training, and vector surveillance and control in countries at highest risk of Zika virus outbreaks; and
- :: Improve diagnostics for Zika virus, including advanced methods to refine tests, and support advanced developments for vector control.

Centers for Medicare and Medicaid Services – \$250 million

The request seeks a temporary one-year increase in Puerto Rico's Medicaid Federal Medical Assistance Percentage (FMAP) to provide an estimated \$250 million in additional Federal assistance to support health services for pregnant women at risk of infection or diagnosed with Zika virus and for children with microcephaly, and other health care costs...

Vaccine Research and Diagnostic Development & Procurement – \$200 million
The request includes \$200 million for research, rapid advanced development and commercialization of new vaccines and diagnostic tests for Zika virus. It includes funding for the National Institutes of Health to build upon existing resources and work to develop a vaccine for Zika virus and the chikungunya virus, which is spread by the same type of mosquito. Funding will accelerate this work and improve scientific understanding of the disease to inform the development of additional tools to combat it. The request also includes resources for the Food and Drug Administration to support Zika virus medical product development including the next generation diagnostic devices.

Other HHS Response Activities – \$210 million

The request includes funding to establish a new Urgent and Emerging Threat Fund to address Zika virus and other outbreaks. This funding would be available to support emerging needs related to Zika, including additional support to States for emerging public health response needs should mosquito populations known to be potential Zika carriers migrate to additional States...

U.S. Agency for International Development - \$335 million

The request includes investments to support affected countries' ability to control mosquitoes and the transmission of the virus; support maternal health; expand public education on prevention and response; and create new incentives for the development of vaccines and diagnostics. The request would also provide flexibility in the use of remaining USAID Ebola funds. Activities would focus particularly on South America, Central America, the Caribbean...

U.S. Department of State - \$41 million

The funding request includes support for U.S. citizens in affected countries, medical support for State Department employees in affected countries, public diplomacy, communications, and other operations activities. State would also support the World Health Organization and its regional arm, the Pan American Health Organization (PAHO), to minimize the Zika threat in

affected countries while reducing the risk of further spreading the virus. These resources will support critical public health actions underway, including preparedness, surveillance, data collection, and risk communication. Activities would also include support for UNICEF's Zika response efforts in Brazil; activities to bolster diagnostic capabilities through deployment of equipment and specialized training.

European Medicines Agency [to 13 February 2016]

http://www.ema.europa.eu/ 08/02/2016

EMA sets up task force on Zika virus

European experts to provide support to global response on the emerging epidemic

The European Medicines Agency (EMA) has established a task force of European experts with specialised knowledge in vaccines, infectious diseases and other relevant expertise to contribute to the global response to the threat of the Zika virus infection. This group will be available to give advice on any scientific and regulatory matters for the research and development of medicines or vaccines against the virus...

...The Agency is encouraging medicines developers to contact EMA if they have any promising projects in this area. EMA will also proactively reach out to companies already planning to work on investigational vaccines and offer scientific and regulatory advice. EMA will review any new information as soon as it becomes available to support the response to this widening public health crisis.

During a health emergency such as the Zika virus outbreak, EMA works closely with European bodies, including the European Commission and the European Centre for Disease Prevention and Control (ECDC) and with international partners such as WHO and other international regulators from affected countries...

Sabin Vaccine Institute [to 13 February 2016]

http://www.sabin.org/updates/ressreleases

Monday, February 8, 2016

<u>Statement on the World Health Organization's Declaration of a Public Health Emergency International Concern for Zika Virus</u>

...The Sabin Vaccine Institute supports the WHO decision to declare the recent outbreak of Zika virus a global health emergency. We believe the highly infectious nature of Zika's growing outbreak, coupled with its possible link to birth defects and other neurological conditions, warrants urgent collaboration among global health partners to accelerate the development of a sustainable measure against Zika — a vaccine.

To facilitate an efficient and effective response, the global health community must strengthen access to scientific evidence and close knowledge gaps in regions most affected by Zika, building information flows among stakeholders.

Global health advocates must also strengthen vector control initiatives and reinforce public awareness of techniques to prevent mosquito bites, currently the most protective measure available. Practices such as the use of insecticides, eliminating standing water and decreasing skin exposure in areas where the Aedes mosquito has been found should be prioritized and articulated extensively.

Lastly, disseminating previous lessons learned from fighting similar diseases, such as dengue fever, will be instrumental to quickly responding to Zika, assessing the potential for developing

a vaccine, keeping communities and international agencies informed and building an integrated response against Zika.

::::::

EBOLA/EVD [to 13 February 2016]

Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

Ebola Situation Reports

[While no announcement of a change in reporting cycle is evident, we deduce that Ebola Situation Reports have been reduced to a bi-weekly cycle given the spacing of the last few reports (last update at 3 February 2016)]

Gavi [to 13 February 2016]

http://www.gavialliance.org/library/news/press-releases/

11 February 2016

<u>Japan commits US\$ 18.5 million to support immunisation in Ebola-affected region</u>
Pledge from G7 President will help revitalise immunisation services and strengthen health systems.

TOKYO, 10 February 2016 – The Government of Japan has committed US\$ 18.5 million to help Gavi restore immunisation services in Ebola-affected countries. The contribution, which is for 2016 and is Japan's largest to Gavi to date, will also support the strengthening of health systems in 13 countries, including Guinea, Liberia and Sierra Leone, where thousands of children missed out on routine vaccinations during the Ebola outbreak.

State Minister for Foreign Affairs, Seiji Kihara, made the announcement ahead of a meeting in Tokyo last Thursday with new Gavi Board Chair Dr Ngozi Okonjo-Iweala. Japan's commitment means that all members of the G7, which will be chaired this year by Japan, have now made pledges to Gavi to support childhood immunisation for the 2016 to 2020 period.

Japan's contribution will help Gavi support work to trace children who missed out on immunisation in the Ebola-hit countries and ensure they are reached through catch-up programmes. The new funding will also help strengthen health systems in the Ebola-affected West Africa region, including purchasing new cold chain equipment to ensure vaccines are stored at the correct temperatures...

EDCTP [to 13 February 2016]

http://www.edctp.org/

The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials.

Ebola grantees have begun collaborations

12 February 2016

Grantees recently selected to conduct a range of research from basic science to implementation research, including capacity development and models of clinical care, have met

for an Ebola Virus Disease (EVD) workshop on 10-11 February 2016 in Ghana to share their planned studies, identify collaborations and finalise project plans.

Six grantees are funded by the European & Developing Countries Clinical Trials Partnership (EDCTP), UK Medical Research Council (MRC), National Health Research Institute Carlos III, and the Special Programme for Research and Training in Tropical Diseases (TDR). Another 12 grantees are funded from a separate Canadian Institutes of Health Research (CIHR) grant competition. Coordination between the funders on these calls for proposals from which successful projects have been funded is in keeping with the objectives of the GLOPID-R (Global Research Collaboration for Infectious Diseases Preparedness), and culminated in the organisation of this workshop, bringing 32 collaborators from the 18 grantees together. Each project contains collaborations between African and northern institutions (Europe and Canada).

::::::

POLIO [to 13 February 2016]

Public Health Emergency of International Concern (PHEIC)

Polio this week as of 10 February 2016

- :: As we enter February 2016, GPEI bids farewell to <u>Hamid Jafari</u>, the former director of GPEI, whose tenure has seen the removal of Nigeria from the list of polio-endemic countries, certification of the eradication of wild poliovirus type 2, and the lowest number of cases reported in the fewest number of places in any one year. GPEI welcomes <u>Michel Zaffran</u>, former coordinator of the WHO Expanded Programme on Immunization (EPI), as its new director, as we enter a pivotal part of the Endgame Plan.
- :: Iraq has introduced the inactivated poliovirus vaccine (IPV) into its routine immunization system. Read more <u>here</u>.
- :: Environmental surveillance is playing an increasingly important role in ensuring that the poliovirus is found, wherever it continues to circulate. Find out more about environmental surveillance through this <u>series of photographs</u>.
- :: There are nine weeks to go until the globally synchronized switch from the trivalent to bivalent oral polio vaccine, an important milestone in achieving a polio-free world. Read more here.

Selected content from Country updates

Afghanistan

:: One new wild poliovirus type 1 (WPV1) case was reported in the past week, with onset of paralysis in Shahwalikot, Kandahar, on 20 December 2015. The total number of WPV1 cases for 2015 is now 20, compared to 28 reported in the country in 2014.

Pakistan

:: The first case of wild poliovirus type 1 (WPV1) in 2016 was reported in the past week, with onset of paralysis in Karachi Gadap, Sindh on 17 January 2016. The total number of WPV1 cases for 2016 is now 1, compared to 7 reported for 2015 at this point last year.

Lao People's Democratic Republic

:: Two new cases of circulating vaccine-derived poliovirus type 1 (cVDPV1) were reported in the past week, in Phonhong and Fueng, Vientiane, with onset of paralysis on 8 January and 11 January 2016 respectively. The total number of cVDPV1 cases in 2016 is 2.

Notes from the Field: Circulating Vaccine-Derived Poliovirus Outbreaks — Five Countries, 2014–2015

MMWR Weekly / February 12, 2016 / 65(05);128-129

Michelle Morales, MD^{1,2}; Chimeremma D. Nnadi, MD, PhD²; Rudolf H. Tangermann, MD³; Steven G.F. Wassilak, MD² (<u>View author affiliations</u>)

[Initial text]

In 2015, wild poliovirus (WPV) transmission was identified in only Afghanistan and Pakistan (1). The widespread use of live, attenuated oral poliovirus vaccine (OPV) has been key in polio eradication efforts. However, OPV use, particularly in areas with low vaccination coverage, is associated with the low risk for emergence of vaccine-derived polioviruses (VDPV), which can cause paralysis (2). VDPVs vary genetically from vaccine viruses and can cause outbreaks in areas with low vaccination coverage. Circulating VDPVs (cVDPVs) are VDPVs in confirmed outbreaks. Single VDPVs for which the origin cannot be determined are classified as ambiguous (aVDPVs), which can also cause paralysis. Among the three types of WPV, type 2 has been declared to be eradicated. More than 90% of cVDPV cases have been caused by type 2 cVDPVs (cVDPV2). Therefore, in April 2016, all OPV-using countries of the world are discontinuing use of type 2 Sabin vaccine by simultaneously switching from trivalent OPV (types 1, 2, and 3) to bivalent OPV (types 1 and 3) for routine and supplementary immunization.

The World Health Organization recently broadened the definition of cVDPVs to include any VDPV with genetic evidence of prolonged transmission (i.e., >1.5 years) and indicated that any single VDPV2 event (a case of paralysis caused by a VDPV or isolation of a VDPV from an environmental specimen) should elicit a detailed outbreak investigation and local immunization response. A confirmed cVDPV2 detection should elicit a full poliovirus outbreak response that includes multiple supplemental immunization activities (SIAs); an aVDPV designation should be made only after investigation and response (3). Since 2005, there have been 1–8 cVDPV outbreaks and 3–12 aVDPV events per year. There are currently five active cVDPV outbreaks in Guinea, Laos, Madagascar, Myanmar, and Ukraine, and four other active VDPV events...

Editor's Note:

See the full text of this *Perspective* in *Journal Watch* below.

Perspective

A World Free of Polio — The Final Steps

Manish Patel, M.D., and Walter Orenstein, M.D. New England Journal of Medicine February 11, 2016 Vol. 374 No. 6

::::::

MERS-CoV [to 13 February 2016]

No new digest content identified.

::::::

WHO & Regionals [to 13 February 2016]

Weekly Epidemiological Record (WER) 12 February 2016, vol. 91, 6 (pp. 61–72) Contents:

- 61 Meeting of the International Task Force for Disease Eradication, November 2015
- 71 Circulating vaccine-derived poliovirus outbreaks in 5 countries, 2014–2015

Disease Outbreak News (DONs)

- :: 12 February 2016 Yellow Fever Angola
- :: 12 February 2016 Zika virus infection United States of America
- :: 12 February 2016 Microcephaly United States of America
- :: 12 February 2016 Guillain-Barré syndrome Colombia and Venezuela
- :: 10 February 2016 Human infection with avian influenza A(H7N9) virus China
- :: 8 February 2016 Guillain-Barré syndrome Brazil
- :: 8 February 2016 Guillain-Barré syndrome France Martinique
- :: 8 February 2016 Zika virus infection Maldives
- :: 8 February 2016 Zika virus infection Region of the Americas

Highlights

Assistive technologies for the elderly and disabled

11 February 2016 -- WHO has launched a global survey to gather views on the most necessary and useful assistive technologies, such as hearing aids and wheelchairs. The survey will feed into the first ever WHO mandated list of essential assistive technologies. Governments can use the list to plan and focus efforts to help populations acquire the 50 priority products, thereby improving the everyday lives of the elderly and people living with disabilities.

Deworming campaign targets 270 million children in one day

February 2016 — An estimated 270 million children across India have received deworming medicine (albendazole) as part of a drive to eliminate intestinal parasitic infections — a widespread problem that affects children's development.

First WHO Global Meeting of National NCD Programme Directors and Managers

February 2016 -- WHO is organizing the First Global Meeting of National NCD Programme Directors and Managers from 15 to 17 February 2016 in Geneva, at the WHO Executive Board Room.

India launches plan to eliminate malaria

February 2016 -- India's Ministry of Health launched an ambitious national roadmap to eliminate malaria. The National Framework for Malaria Elimination in India 2016-2030, aims to reduce malaria case incidence and deaths to 0 over the next 15 years.

:: WHO Regional Offices

WHO African Region AFRO

:: Official visit of WHO Regional Director for Africa, Dr Moeti to Gabon

Brazzaville/Libreville, 12 February 2016 - The WHO Regional Director for Africa, Dr Matshidiso Moeti is in Libreville, Gabon, for a 5 day official visit and to participate in the 7th Conference of Health Ministers of the Economic Community of Central African States (ECCAS), which begins today...

WHO Region of the Americas PAHO

No new digest content identified.

WHO South-East Asia Region SEARO

:: WHO lauds India's de-worming initiative 10 February 2016

WHO European Region EURO

No new digest content identified.

WHO Eastern Mediterranean Region EMRO

:: WHO welcomes unprecedented international support for Syrians

10 February 2016

:: WHO and Ministry of Health endorse joint action to meet health needs and challenges in Iraq

10 February 2016

WHO Western Pacific Region

No new digest content identified.

::::::

CDC/ACIP [to 13 February 2016] http://www.cdc.gov/media/index.html http://www.cdc.gov/vaccines/acip/

[see Zika coverage above which includes CDC briefing content]

ACIP Meeting - February 24, 2016 (Wednesday only)

Meeting Webcast Instructions

Registration is NOT required to watch the live meeting webcast or to listen via telephone.

DRAFT AGENDA[2 pages] (as of January 25)

Deadline for registration:

Non-US Citizens: February 3, 2016 US Citizens: February 10, 2016

MMWR Weekly – February 12, 2016 / Vol. 65 / No. 5

http://www.cdc.gov/mmwr/mmwr wk.html

- :: Influenza-Related Hospitalizations and Poverty Levels United States, 2010–2012
- :: Interim Guidelines for Prevention of Sexual Transmission of Zika Virus United States, 2016
- :: <u>Update</u>: <u>Interim Guidelines for Health Care Providers Caring for Pregnant Women and Women</u>

:: <u>Notes from the Field: Circulating Vaccine-Derived Poliovirus Outbreaks — Five Countries,</u> 2014–2015

<u>Surveillance of Vaccination Coverage Among Adult Populations — United States,</u> **2014**

FEBRUARY 5, 2016

Adults are recommended to receive vaccinations based on their age, underlying medical conditions, lifestyle, prior vaccinations, and other considerations. Updated vaccination recommendations from CDC are published annually in the U.S. Adult Immunization Schedule. Despite longstanding recommendations for use of many vaccines, vaccination coverage among U.S. adults is low. Data for 2014 for adult vaccination coverage in the United States indicate that aside from a few minor improvements, vaccination coverage among adults in 2014 was similar to estimates from 2013. This report represents the first comprehensive release of adult vaccination coverage data to include assessment of associations with expanded data on demographic characteristics of respondents including access to health care. These findings can be used by public health practitioners, adult vaccination providers, and the general public to better understand factors that contribute to low vaccination and modify strategies and interventions to improve vaccination coverage.

::::::

Announcements/Milestones/Perspectives

Global Fund [to 13 February 2016] http://www.theglobalfund.org/en/news/11 February 2016

Global Fund Congratulates India on Launch of Malaria Elimination Framework

NEW DELHI - The Global Fund to Fight AIDS, Tuberculosis and Malaria praised India's

leadership and vision for launching an ambitious national framework to eliminate malaria by 2030, and called the country's significant progress against the disease an example in global health.

With the support of many partners, India has seen a dramatic decline in malaria rates and malaria deaths. Through combined interventions that include rapid diagnostic tests, artemisinin-based combination therapy, long-lasting insecticidal nets and indoor residual spraying, India is projected to achieve a fall in case incidence of 50-75 percent between 2000 and 2015.

"India is showing others that with commitment, partnership and innovative strategies we can eliminate malaria," Mark Dybul, Executive Director of the Global Fund, said during the presentation of the National Framework for Malaria Elimination in India 2016-2030 and the Operational Guidelines for Malaria Elimination in India. "This framework is a hugely important step that gets us closer towards that goal."

J.P. Nadda, Minister of Health and Family Welfare of India, stressed his country's engagement to eliminate the disease. "I can only assure you that the Government of India fully stands

committed to the malaria elimination program, with the support of all stakeholders," said Nadda.

During a two-day meeting that brought together the Government of India, WHO, academics and the Indian and global public health sector, partners discussed strategies and implementation of the framework, innovation and research, health system strengthening, and shared experiences for malaria elimination.

Under the framework, India aims to eliminate malaria (zero indigenous cases) throughout the entire country by 2030, and maintain malaria-free status in areas where malaria transmission has been interrupted and prevent re-introduction of malaria. Elimination will be undertaken in a phased manner, with states with low incidence rates first, followed by the high-incidence ones. The framework is in line with the Asia Pacific Leaders' Malaria Alliance Malaria Elimination Roadmap for 2030...

09 February 2016

U.S. Demonstrates Strong Commitment to Global Health

GENEVA - The Global Fund to Fight AIDS, Tuberculosis and Malaria expressed deep appreciation for President Barack Obama's request for US\$1.35 billion for the Global Fund in his 2017 budget proposal, calling it a demonstration of great commitment to global health.

"We are privileged to call the United States our partner in efforts to end HIV, tuberculosis and malaria as epidemics," said Mark Dybul, Executive Director of the Global Fund. "The U.S. has shown extremely strong leadership and continues to rally support from countries and partners worldwide to reach our common goals."

The United States is the largest supporter of the Global Fund, contributing nearly one-third of overall funding, and connecting it to other U.S.-led efforts on global health. Ground-breaking work by the President's Emergency Plan for AIDS Relief (PEPFAR) includes the launch of DREAMS, an ambitious partnership to reduce HIV infections among adolescent girls and young women in 10 African countries. The Global Fund also works closely with the President's Malaria Initiative and with USAID on tuberculosis, to leverage and expand joint efforts...

PATH [to 13 February 2016]

http://www.path.org/news/index.php

Press release | February 12, 2016

PATH and Siemens Foundation partner to launch Ingenuity Fellowships

A global health opportunity for university students in science, technology, engineering, and math

Announcement | February 08, 2016

<u>PATH partners with Health Affairs to highlight importance of accelerated action on global immunization goals</u>

Theme issue and policy discussion mark the midpoint of the Decade of Vaccines

Fondation Merieux [to 13 February 2016]

Mission: Contribute to global health by strengthening local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.

http://www.fondation-merieux.org/news

Fondation Mérieux supports global scientific community commitment to share data on Zika

10 February 2016, Cambridge (UK)

::::::

UNICEF [to 13 February 2016]

http://www.unicef.org/media/media 89711.html

No new digest content identified.

NIH [to 13 February 2016]

http://www.nih.gov/news/releases.htm

No new digest content identified.

FDA [to 13 February 2016]

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm No new digest content identified.

BMGF - Gates Foundation [to 13 February 2016]

http://www.gatesfoundation.org/Media-Center/Press-Releases

No new digest content identified.

National Foundation for Infectious Diseases (NFID) [to 13 February 2016]

http://www.nfid.org/newsroom/press-releases

No new digest content identified.

IVAC [International Vaccine Access Center] [to 13 February 2016]

http://www.jhsph.edu/research/centers-and-institutes/ivac/about-us/news.html *No new digest content identified.*

European Vaccine Initiative [to 13 February 2016]

http://www.euvaccine.eu/news-events

No new digest content identified.

DCVMN [Developing Country Vaccine Manufacturers Network] [to 13 February 2016]

http://www.dcvmn.org/

No new digest content identified

AERAS [to 13 February 2016]

http://www.aeras.org/pressreleases

No new digest content identified.

IAVI International AIDS Vaccine Initiative [to 13 February 2016]

http://www.iavi.org/press-releases/2016

No new digest content identified.

IVI [to 13 February 2016] http://www.ivi.org/web/www/home No new digest content identified.

* * * *

<u>Reports/Research/Analysis/Commentary/Conferences/Meetings/Book</u> <u>Watch/Tenders</u>

Vaccines and Global Health: The Week in Review has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health, health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

THE NATIONAL ADULT IMMUNIZATION PLAN (NAIP)

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL VACCINE PROGRAM OFFICE

February 2016 :: 67n pages

Pdf: http://www.hhs.gov/nvpo/national-adult-immunization-plan/naip.pdf

EXECUTIVE SUMMARY

Vaccination is considered one of the most important public health achievements of the 20th century and continues to offer great promise in the 21st century. Vaccines save lives and improve the quality of life by preventing serious infectious diseases and their consequences. However, the benefits of vaccination are not realized equally across the U.S. population. Adult vaccination rates remain low in the United States, and significant racial and ethnic disparities also exist.

The U.S. Department of Health and Human Services National Vaccine Plan (NVP), released in 2010, is a road map for vaccines and immunization programs for the decade 2010–2020. While the NVP provides a vision for improving protection from vaccine- preventable diseases across the lifespan, vaccination coverage levels among adults are not on track to meet Healthy People 2020 targets. The National Vaccine Advisory Committee and numerous stakeholder groups have emphasized the need for focused attention on adult vaccines and vaccination.1 The National Adult Immunization Plan (NAIP) outlined here results from the recognition that progress has been slow and that there is a need for a national adult immunization strategic plan.

As a national plan, the NAIP will require engagement from a wide range of stakeholders to achieve its full vision. The plan emphasizes collaboration and prioritization of efforts that will have the greatest impact. The NAIP also aims to leverage the unique opportunity presented by the implementation of the Affordable Care Act.

The NAIP is intended to facilitate coordinated action by federal and nonfederal partners to protect public health and achieve optimal prevention of infectious diseases and their consequences through vaccination of adults. The NAIP includes indicators to draw attention to

and track progress against core goals. These indicators will measure progress against set standards and inform future implementation and quality improvement efforts.

The plan establishes four key goals, each of which is supported by objectives and strategies to guide implementation through 2020:

Goal 1: Strengthen the adult immunization infrastructure.

Goal 2: Improve access to adult vaccines.

Goal 3: Increase community demand for adult immunizations.

Goal 4: Foster innovation in adult vaccine development and vaccination-related technologies.

Ministerial Conference on Immunization in Africa TOWARD UNIVERSAL IMMUNIZATION COVERAGE AS A CORNERSTONE FOR HEALTH AND DEVELOPMENT IN AFRICA

February 24-25 in Addis Ababa, Ethiopia.

African leaders—including health and finance ministers—will come together in Addis Ababa, making the conference a powerful platform for governments to demonstrate their commitment to expanding access to vaccines across the continent. The event will also bring together advocates, technical experts, policymakers, donors and journalists to examine how best to drive forward immunization across Africa, ensuring every child has access to the vaccines they need.

Universal access to immunization is at the forefront of enabling Africa to reach its full potential – by improving health, driving economic growth and empowering future generations. Immunization is one of the most cost-effective solutions in global health, with clear benefits for health and development. Vaccines are a major reason child deaths in Africa fell by more than half between 1990 to 2012, saving millions of lives. Immunization brings economic benefits too, reducing health care costs and increasing productivity.

The conference will be hosted by the World Health Organization's Regional Offices for Africa and for the Eastern Mediterranean in conjunction with the African Union, reflecting the breadth of desire across the continent to drive improvements in access to immunization...

* * *

Journal Watch

Vaccines and Global Health: The Week in Review continues its weekly scanning of key peer-reviewed journals to identify and cite articles, commentary and editorials, books reviews and other content supporting our focus on vaccine ethics and policy. Journal Watch is not intended to be exhaustive, but indicative of themes and issues the Center is actively tracking. We selectively provide full text of some editorial and comment articles that are specifically relevant to our work. Successful access to some of the links provided may require subscription or other access arrangement unique to the publisher.

If you would like to suggest other journal titles to include in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

American Journal of Infection Control

February 2016 Volume 44, Issue 2, p125-252, e9-e14 http://www.ajicjournal.org/current

[Reviewed earlier]

American Journal of Preventive Medicine

February 2016 Volume 50, Issue 2, p129-294, e33-e64 http://www.ajpmonline.org/current [Reviewed earlier]

American Journal of Public Health

Volume 106, Issue 2 (February 2016) http://ajph.aphapublications.org/toc/ajph/current [Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

February 2016; 94 (2) http://www.ajtmh.org/content/current [Reviewed earlier]

Annals of Internal Medicine

2 February 2016, Vol. 164. No. 3 http://annals.org/issue.aspx [Reviewed earlier]

BMC Health Services Research

http://www.biomedcentral.com/bmchealthservres/content (Accessed 13 February 2016) Research article

<u>Inequalities in utilization of maternal and child health services in Ethiopia: the role of primary health care</u>

Solomon Tessema Memirie, Stéphane Verguet, Ole F. Norheim, Carol Levin and Kjell Arne Johansson

BMC Health Services Research 2016 16:51

Published on: 12 February 2016

Abstract Background

Health systems aim to narrow inequality in access to health care across socioeconomic groups and area of residency. However, in low-income countries, studies are lacking that systematically monitor and evaluate health programs with regard to their effect on specific inequalities. We aimed to measure changes in inequality in access to maternal and child health (MCH) interventions and the effect of Primary Health Care (PHC) facilities expansion on the inequality in access to care in Ethiopia.

Methods

The Demographic and Health Survey datasets from Ethiopia (2005 and 2011) were used. We calculated changes in utilization of MCH interventions and child morbidity. Concentration and

horizontal inequity indices were estimated. Decomposition analysis was used to calculate the contribution of each determinant to the concentration index.

Results

Between 2005 and 2011, improvements in aggregate coverage have been observed for MCH interventions in Ethiopia. Wealth-related inequality has remained persistently high in all surveys. Socioeconomic factors were the main predictors of differences in maternal and child health services utilization and child health outcome. Utilization of primary care facilities for selected maternal and child health interventions have shown marked pro-poor improvement over the period 2005–2011.

Conclusions

Our findings suggest that expansion of PHC facilities in Ethiopia might have an important role in narrowing the urban-rural and rich-poor gaps in health service utilization for selected MCH intervention.

BMC Infectious Diseases

http://www.biomedcentral.com/bmcinfectdis/content

(Accessed 13 February 2016)

Research article

Measuring the potential of individual airports for pandemic spread over the world airline network

Glenn Lawyer

BMC Infectious Diseases 2016 16:70 Published on: 9 February 2016

Abstract Background

Massive growth in human mobility has dramatically increased the risk and rate of pandemic spread. Macro-level descriptors of the topology of the World Airline Network (WAN) explains middle and late stage dynamics of pandemic spread mediated by this network, but necessarily regard early stage variation as stochastic. We propose that much of this early stage variation can be explained by appropriately characterizing the local network topology surrounding an outbreak's debut location.

Methods

Based on a model of the WAN derived from public data, we measure for each airport the expected force of infection (AEF) which a pandemic originating at that airport would generate, assuming an epidemic process which transmits from airport to airport via scheduled commercial flights. We observe, for a subset of world airports, the minimum transmission rate at which a disease becomes pandemically competent at each airport. We also observe, for a larger subset, the time until a pandemically competent outbreak achieves pandemic status given its debut location. Observations are generated using a highly sophisticated metapopulation reaction-diffusion simulator under a disease model known to well replicate the 2009 influenza pandemic. The robustness of the AEF measure to model misspecification is examined by degrading the underlying model WAN.

Results

AEF powerfully explains pandemic risk, showing correlation of 0.90 to the transmission level needed to give a disease pandemic competence, and correlation of 0.85 to the delay until an outbreak becomes a pandemic. The AEF is robust to model misspecification. For 97 % of airports, removing 15 % of airports from the model changes their AEF metric by less than 1 %.

Conclusions

Appropriately summarizing the size, shape, and diversity of an airport's local neighborhood in the WAN accurately explains much of the macro-level stochasticity in pandemic outcomes.

BMC Medical Ethics

http://www.biomedcentral.com/bmcmedethics/content (Accessed 13 February 2016) Debate

Ebola vaccine development plan: ethics, concerns and proposed measures

Morenike Oluwatoyin Folayan, Aminu Yakubu, Bridget Haire and Kristin Peterson

Published on: 8 February 2016

Abstract Background

The global interest in developing therapies for Ebola infection management and its prevention is laudable. However the plan to conduct an emergency immunization program specifically for healthcare workers using experimental vaccines raises some ethical concerns. This paper shares perspectives on these concerns and suggests how some of them may best be addressed. Discussion

The recruitment of healthcare workers for Ebola vaccine research has challenges. It could result in coercion of initially dissenting healthcare workers to assist in the management of EVD infected persons due to mistaken beliefs that the vaccine offers protection. It could also affect equity and justice. For example, where people who are not skilled health care professionals but who provide care to patients infected with Ebola (such as in home care settings) are not prioritized for vaccination. The possibility of study participants contracting Ebola infection despite the use of experimental vaccine, and the standard of care they would receive, needs to be addressed clearly, transparently and formalized as part of the ethics review process. Future access to study products in view of current status of the TRIPS agreement needs to be addressed. Finally, broad stakeholder engagement at local, regional and international levels needs to be promoted using available communication channels to engage local, regional and international support. These same concerns are applicable for current and future epidemics. Summary

Successful Ebola vaccine development research requires concerted efforts at public dialogue to address misconceptions, equity and justice in participant selection, and honest discussions about risks, benefits and future access. Public dialogue about Ebola vaccine research plans is crucial and should be conducted by trusted locals and negotiated between communities, researchers and ethics committees in research study sites.

BMC Medicine

http://www.biomedcentral.com/bmcmed/content (Accessed 13 February 2016) [No new relevant content identified]

BMC Pregnancy and Childbirth

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 13 February 2016)

Research article

<u>Improved pregnancy outcomes with increasing antiretroviral coverage in South</u> Africa

An improvement in birth outcomes is likely associated with the increased coverage of triple antiretroviral treatment for pregnant women. And untreated HIV infected women and women who do not seek antenatal care should be considered most at risk for poor birth outcomes. Theron Moodley, Dhayendre Moodley, Motshedisi Sebitloane, Niren Maharaj and Benn Sartorius Published on: 11 February 2016

BMC Public Health

http://bmcpublichealth.biomedcentral.com/articles (Accessed 13 February 2016) [No new relevant content identified]

BMC Research Notes

http://www.biomedcentral.com/bmcresnotes/content (Accessed 13 February 2016)
[No new relevant content identified]

BMJ Open

2016, Volume 6, Issue 2 http://bmjopen.bmj.com/content/current [Reviewed earlier]

British Medical Journal

13 February 2016 (vol 352, issue 8044) http://www.bmj.com/content/352/8044
[New issue; No relevant content identified]

Bulletin of the World Health Organization

Volume 94, Number 2, February 2016, 77-156 http://www.who.int/bulletin/volumes/94/2/en/ [Reviewed earlier]

Clinical Infectious Diseases (CID)

Volume 62 Issue 5 March 1, 2016 http://cid.oxfordjournals.org/content/current [New issue; No relevant content identified]

Clinical Therapeutics

January 2016 Volume 38, Issue 1, p1-232

http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Complexity

January/February 2016 Volume 21, Issue 3 Pages 1–88 http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.3/issuetoc [Reviewed earlier]

Conflict and Health

http://www.conflictandhealth.com/ [Accessed 13 February 2016] [No new relevant content]

Contemporary Clinical Trials

Volume 47, In Progress (March 2016)

http://www.sciencedirect.com/science/journal/15517144/47

Original Research Article

<u>Deconstructing the measure of vaccine efficacy against disease irrespective of HPV in HPV vaccine clinical trials</u>

Pages 254-258

Oliver M. Bautista, Alain Luxembourg

Abstract

Background

Human papillomavirus (HPV) vaccines were licensed by demonstrating prevention of anogenital disease caused by specific HPV types in clinical studies. Measuring the impact of HPV vaccination on the overall burden of anogenital disease (irrespective of HPV) is an important public health question which is ideally addressed in post-licensure epidemiological studies. Attempts were made to use clinical trial data for that purpose. However, the interpretation of vaccine efficacy on the endpoint of disease irrespective of HPV is not widely understood. Methods

We used the 9-valent HPV vaccine clinical program as a case study to determine the value of measuring vaccine efficacy in such endpoint. This assessment was rigorously performed by heuristic reasoning and through probability calculations.

Results

The measure of vaccine efficacy in the irrespective of HPV endpoint is driven simultaneously in opposite directions by the high estimate of prophylactic efficacy and a numerically negative estimate of risk reduction that is also a reflection of high prophylactic efficacy and no cross-protection.

Conclusions

The vaccine efficacy estimate in the irrespective of HPV endpoint is ambiguous and difficult to interpret. Comparing this estimate across different HPV vaccine studies requires an understanding of the contributions of vaccine HPV type efficacy and the incidence of disease not related to vaccine HPV types for each study. Without such understanding, comparing studies and drawing conclusions from such comparison are highly misleading. Approaches are proposed to divide this endpoint in components that are easier to interpret.

Cost Effectiveness and Resource Allocation

http://www.resource-allocation.com/ (Accessed 13 February 2016) [No new content]

Current Opinion in Infectious Diseases

February 2016 - Volume 29 - Issue 1 pp: v-vi,1-98 http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx [Reviewed earlier]

Developing World Bioethics

December 2015 Volume 15, Issue 3 Pages iii–iii, 115–275 http://onlinelibrary.wiley.com/doi/10.1111/dewb.2015.15.issue-3/issuetoc [Reviewed earlier]

Development in Practice

Volume 26, Issue 2, 2016 http://www.tandfonline.com/toc/cdip20/current Articles

African solutions to African problems and the Ebola virus disease in Nigeria

Nathaniel Umukoro pages 149-157

DOI:10.1080/09614524.2016.1133563

Published online: 10 Feb 2016

ABSTRACT

Africa grapples with the world's most serious public health crisis, but this article shows that there are public health solutions that work in the African setting. When the Ebola virus disease outbreak was announced in Nigeria in July 2014, some public health specialists worried that an apocalyptic outbreak would sweep through the vast slums of Lagos. The words "Ebola" and "Lagos" in the same sentence were viewed as a dangerous combination, due to the large population of Lagos and the inefficient health care system in the city. Contrary to this view, the outbreak of Ebola virus disease was successfully contained in Nigeria. This article focuses on the factors that were responsible for this success. It examines strategies developed within Nigeria that help to ensure the successful containment of the disease. The paper identifies lessons that can be learnt by other countries from the Nigerian experience.

Practical Note

Management and safety of a medical mission: occupational hazards of volunteering

Aidan Tan, Yuke Tien Fong, Sweet Far Ho, Boon Keng Tay & Yeow Leng Chua

pages 251-257

DOI:10.1080/09614524.2016.1131245

Published online: 10 Feb 2016

ABSTRACT

Medical aid missions involve travel to conflict or danger zones, posing safety risks in addition to the usual occupational risks arising from daily medical work. The note reports on a volunteer mission, using personal reports, anecdotal experiences, and the formal annual report to undertake an assessment similar to worksite assessments for hazards and control measures. Hazards were found to be prevalent, including physical noise and heat, infectious exposure from patients and local vectors, poor water sanitation, and psychosocial stress from unfamiliar environments and large patient numbers with limited means. Implementable preventative measures include increasing awareness with appropriate protective equipment usage and safety guidelines. Mission planning and management should also involve occupational health input.

Disasters

January 2016 Volume 40, Issue 1 Pages 1–182 http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-1/issuetoc [Reviewed earlier]

Emerging Infectious Diseases

Volume 22, Number 2—February 2016 http://wwwnc.cdc.gov/eid/
Expedited Ahead-of-Print Articles

Detection of Zika Virus in Semen

B. Atkinson et al.

May 2016

Perspective

<u>Ebola and Its Control in Liberia, 2014–2015</u> <u>PDF Version [PDF - 525 KB - 9 pages]</u> T. G. Nyenswah et al.

Abstract

The severe epidemic of Ebola virus disease in Liberia started in March 2014. On May 9, 2015, the World Health Organization declared Liberia free of Ebola, 42 days after safe burial of the last known case-patient. However, another 6 cases occurred during June—July; on September 3, 2015, the country was again declared free of Ebola. Liberia had by then reported 10,672 cases of Ebola and 4,808 deaths, 37.0% and 42.6%, respectively, of the 28,103 cases and 11,290 deaths reported from the 3 countries that were heavily affected at that time. Essential components of the response included government leadership and sense of urgency, coordinated international assistance, sound technical work, flexibility guided by epidemiologic data, transparency and effective communication, and efforts by communities themselves. Priorities after the epidemic include surveillance in case of resurgence, restoration of health services, infection control in healthcare settings, and strengthening of basic public health systems.

Synopses

<u>Prefectures, Guinea, 2014–2015</u> <u>PDF Version [PDF - 524 KB - 6 pages]</u>
A. Rico et al.

Hospital Preparations for Viral Hemorrhagic Fever Patients and Experience Gained from Admission of an Ebola Patient PDF Version [PDF - 1.01 MB - 8 pages]

J. Haverkort et al.

Research

<u>Feasibility of Xpert Ebola Assay in Médecins Sans Frontières Ebola Program, Guinea PDF Version [PDF - 564 KB - 7 pages]</u>

R. Van den Bergh et al.

<u>Prognostic Indicators for Ebola Patient Survival PDF Version [PDF - 578 KB - 7 pages]</u>

S. J. Crowe et al.

Epidemics

Volume 15, <u>In Progress</u> (June 2016) http://www.sciencedirect.com/science/journal/17554365 [No new relevant content]

Epidemiology and Infection

Volume 144 - Issue 04 - March 2016

http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue

Original Papers

Other respiratory infections

<u>Shelter crowding and increased incidence of acute respiratory infection in evacuees following the Great Eastern Japan Earthquake and tsunami</u>

T. KAWANO, Y. TSUGAWA, K. NISHIYAMA, H. MORITA, O. YAMAMURA and K. HASEGAWA SUMMARY

Although outbreaks of acute respiratory infection (ARI) at shelters are hypothesized to be associated with shelter crowding, no studies have examined this relationship. We conducted a retrospective study by reviewing medical records of evacuees presenting to one of the 37 clinics at the shelters in Ishinomaki city, Japan, during the 3-week period after the Great Eastern Japan Earthquake and tsunami in 2011. On the basis of a locally weighted scatter-plot smoothing technique, we categorized 37 shelters into crowded (mean space <5.5 m2/per person) and non-crowded (\geq 5.5 m2) shelters. Outcomes of interest were the cumulative and daily incidence rate of ARI/10 000 evacuees at each shelter. We found that the crowded shelters had a higher median cumulative incidence rate of ARI [5.4/10 000 person-days, interquartile range (IQR) 0–24.6, P = 0.04] compared to the non-crowded shelters (3.5/10 000 person-days, IQR 0–8.7) using Mann–Whitney U test. Similarly, the crowded shelters had an increased daily incidence rate of ARI of 19.1/10 000 person-days (95% confidence interval 5.9–32.4, P < 0.01) compared to the non-crowded shelters using quasi-least squares method. In sum, shelter crowding was associated with an increased incidence rate of ARI after the natural disaster.

Original Papers

Measles

Reasons for measles cases not being vaccinated with MMR: investigation into parents' and carers' views following a large measles outbreak

P. McHALE, A. KEENAN and S. GHEBREHEWET

SUMMARY

Uptake rates for the combined measles, mumps and rubella (MMR) vaccine have been below the required 95% in the UK since a retracted and discredited article linking the MMR vaccine with autism and inflammatory bowel disease was released in 1998. This study undertook semi-structured telephone interviews among parents or carers of 47 unvaccinated measles cases who were aged between 13 months and 9 years, during a large measles outbreak in Merseyside. Results showed that concerns over the specific links with autism remain an important cause of refusal to vaccinate, with over half of respondents stating this as a reason. A quarter stated child illness during scheduled vaccination time, while other reasons included general safety concerns and access issues. Over half of respondents felt that more information or a discussion with a health professional would help the decision-making process, while a third stated improved access. There was clear support for vaccination among respondents when asked about current opinions regarding MMR vaccine. The findings support the hypothesis that safety concerns remain a major barrier to MMR vaccination, and also support previous evidence that experience of measles is an important determinant in the decision to vaccinate.

The European Journal of Public Health

Volume 26, Issue 1, 1 February 2016 http://eurpub.oxfordjournals.org/content/26/1 Viewpoints

Europe's migration challenges: mounting an effective health system response

Govin Permanand, Allan Krasnik, Hans Kluge, Martin McKee

DOI: http://dx.doi.org/10.1093/eurpub/ckv249 3-4 First published online: 1 February 2016 Extract

Health systems are at the forefront of the response to the ongoing humanitarian crisis facing refugees and other migrants fleeing to Europe, both as a first point of contact for arrivals and later during their resettlement and beyond. (The term 'migrant' is used here with the understanding that there are numerous groups that fall within this categorization, but which are distinct in terms of their status, e.g. asylum-seeker, refugee, undocumented migrant, economic migrant, family-reunited migrant, etc., where a specific group is mentioned by name, it is in a context where this specificity is required.) Yet even if the scale of migration is new, at least in the post-war period, some European countries have considerable experience of sudden largescale immigration, whether from Algeria to France in the 1960s, East African Asians coming to the United Kingdom in the 1970s, refugees from former Yugoslavia in the 1990s and, more recently, across the Mediterranean to Italy, Malta and Spain. However, few lessons seem to have been learnt, and European health systems vary greatly in their ability to respond to this new challenge.1The situation is complicated further by differences in formal entitlement to health care, 2 even though it is now clear that restricting access costs more money in the long run.3 The challenges facing undocumented migrants are particularly alarming, as many of those now moving either fall into this category already or will soon do so if their applications for asylum are rejected.

Even where migrants are entitled to care they may face many barriers. These include language barriers and inadequate information about their rights and how to claim them...

<u>Europe's response to the refugee crisis: why relocation quotas will fail to achieve 'fairness' from a health perspective</u>

Kayvan Bozorgmehr, Joachim Szecsenyi, Christian Stock, Oliver Razum

DOI: http://dx.doi.org/10.1093/eurpub/ckv246 5-6 First published online: 1 February 2016 Extract

EU refugee law is deficient—this has become obvious as thousands of refugees cross the Mediterranean and EU borders to reach a safe destination. Germany's Chancellor Angela Merkel calls for a scheme of compulsory relocation of refugees to EU member states to achieve a 'fair' distribution1 based on 'objective, quantifiable and verifiable criteria' such as GDP, population size and unemployment rates.2 While we strongly believe that providing international protection to refugees is a collective duty of EU member states, we argue that the concept of their 'fair' (but factually enforced) relocation across the EU is flawed and may ultimately be detrimental from a public health perspective.

First, if fairness is defined as the product of a quota based on a contract between EU member states, the interests of non-contractors (here refugees) remain neglected—a dilemma inherent in contractarian concepts of fairness.3...

Eurosurveillance

Volume 21, Issue 6, 11 February 2016

http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678 Rapid communications

Zika virus infections in three travellers returning from South America and the Caribbean respectively, to Montpellier, France, December 2015 to January 2016 by A Maria, M Maquart, A Makinson, O Flusin, M Segondy, I Leparc-Goffart, V Le Moing, V Foulongne

News

<u>European Commission Horizon 2020 programme call for vaccine development research into malaria and neglected infectious diseases, including Zika virus by Eurosurveillance editorial team</u>

Global Health: Science and Practice (GHSP)

December 2015 | Volume 3 | Issue 4 http://www.ghspjournal.org/content/current [Reviewed earlier]

Global Health Governance

http://blogs.shu.edu/ghg/category/complete-issues/spring-autumn-2014/ [Accessed 13 February 2016] [No new content]

Global Public Health

Volume 11, Issue 3, 2016 http://www.tandfonline.com/toc/rgph20/current [Reviewed earlier]

Globalization and Health

http://www.globalizationandhealth.com/ [Accessed 13 February 2016] [No new relevant content]

Health Affairs

February 2016; Volume 35, Issue 2

http://content.healthaffairs.org/content/current

Issue Focus: Vaccines

Vaccine Discovery, Production, And Delivery

Alan R. Weil Extract

Vaccines are a bit like a wonder drug. A shot or two is all it takes to prevent premature death or a lifetime of disability. What more do we need to know? Quite a lot, it turns out. The gap between the potential vaccines offer and what we actually achieve is determined by myriad social, economic, political, and health system factors.

As Seth Berkley, CEO of Gavi, the Vaccine Alliance, notes in an interview in these pages: "Vaccines do not deliver themselves." They also don't finance their own development or distribution, educate the public about their benefits, or eliminate income disparities in access to health services.

The complex environment in which vaccines are discovered, produced, and delivered is the theme of this month's *Health Affairs*.

DataGraphic

Why The Decade Of Vaccines?

Health Aff February 2016 35:188-189; doi:10.1377/hlthaff.2015.1518

Interview

Eliminating Vaccine-Preventable Diseases Around The World

Alan R. Weil

Entry Point

The United States' Piecemeal Approach To Vaccine Policy

Jessica Bylander

Health Aff February 2016 35:195-198; doi:10.1377/hlthaff.2015.1599

Value Of Vaccines

Return On Investment From Childhood Immunization In Low- And Middle-Income Countries, 2011–20

Sachiko Ozawa, Samantha Clark, Allison Portnoy, Simrun Grewal, Logan Brenzel, and Damian G. Walker

<u>PERSPECTIVE: When Not All That Counts Can Be Counted: Economic Evaluations</u> <u>And The Value Of Vaccination</u>

Jason L. Schwartz and Adel Mahmoud

Health Aff February 2016 35:208-211; doi:10.1377/hlthaff.2015.1438

VIEWPOINT: The Social Value Of Vaccination Programs: Beyond Cost-Effectiveness

Jeroen Luyten and Philippe Beutels

Health Aff February 2016 35:212-218; doi:10.1377/hlthaff.2015.1088

Economics Of Vaccines

<u>Vaccine Pipeline Has Grown During The Past Two Decades With More Early-Stage</u> <u>Trials From Small And Medium-Size Companies</u>

Thomas J. Hwang and Aaron S. Kesselheim

Health Aff February 2016 35:219-226; doi:10.1377/hlthaff.2015.1073

<u>Current Global Pricing For Human Papillomavirus Vaccines Brings The Greatest</u> <u>Economic Benefits To Rich Countries</u>

Niamh Herlihy, Raymond Hutubessy, and Mark Jit

Health Aff February 2016 35:227-234; doi:10.1377/hlthaff.2015.1411

No Shot: US Vaccine Prices And Shortages

David B. Ridley, Xiaoshu Bei, and Eli B. Liebman

Sustainable Financing For Vaccines

<u>Vaccine Assistance To Low- And Middle-Income Countries Increased To \$3.6 Billion</u> In 2014

Annie Haakenstad, Maxwell Birger, Lavanya Singh, Patrick Liu, Stephen Lim, Marie Ng, and Joseph L. Dieleman

Gavi's Transition Policy: Moving From Development Assistance To Domestic Financing Of Immunization Programs

Judith Kallenberg, Wilson Mok, Robert Newman, Aurélia Nguyen, Theresa Ryckman, Helen Saxenian, and Paul Wilson

Health Aff February 2016 35:250-258; doi:10.1377/hlthaff.2015.1079

<u>EPIC Studies: Governments Finance, On Average, More Than 50 Percent Of</u> Immunization Expenses, 2010–11

Logan Brenzel, Carl Schütte, Keti Goguadze, Werner Valdez, Jean-Bernard Le Gargasson, and Teresa Guthrie

ANALYSIS & COMMENTARY: Routes Countries Can Take To Achieve Full Ownership Of Immunization Programs

Michael McQuestion, Andrew Carlson, Khongorzul Dari, Devendra Gnawali, Clifford Kamara, Helene Mambu-Ma-Disu, Jonas Mbwanque, Diana Kizza, Dana Silver, and Eka Paatashvili Health Aff February 2016 35:266-271; doi:10.1377/hlthaff.2015.1067

<u>PERSPECTIVE: Country Ownership And Gavi Transition: Comprehensive Approaches</u> <u>To Supporting New Vaccine Introduction</u>

Angela K. Shen, Jonathan M. Weiss, Jon Kim Andrus, Clint Pecenka, Deborah Atherly, Katherine Taylor, and Michael McQuestion

Strengthening Immunization Programs

ANALYSIS & COMMENTARY: The Global Polio Eradication Initiative: Progress, Lessons Learned, And Polio Legacy Transition Planning

Stephen L. Cochi, Lea Hegg, Anjali Kaur, Carol Pandak, and Hamid Jafari Health Aff February 2016 35:277-283; doi:10.1377/hlthaff.2015.1104

<u>Assessing Interventions To Improve Influenza Vaccine Uptake Among Health Care</u> Workers

Harunor Rashid, Jiehui Kevin Yin, Kirsten Ward, Catherine King, Holly Seale, and Robert Booy Health Aff February 2016 35:284-292; doi:10.1377/hlthaff.2015.1087

Reorganizing Nigeria's Vaccine Supply Chain Reduces Need For Additional Storage Facilities, But More Storage Is Required

Ekundayo Shittu, Melissa Harnly, Shanta Whitaker, and Roger Miller

INNOVATION PROFILE: Argentina's Successful Implementation Of A National Human Papillomavirus Vaccination Program

Hannah Patel, Ellen Wilson, Carla Vizzotti, Greg Parston, Jessica Prestt, and Ara Darzi

<u>Strategies To Boost Maternal Immunization To Achieve Further Gains In Improved</u> <u>Maternal And Newborn Health</u>

Mark R. Steedman, Beate Kampmann, Egbert Schillings, Hanan Al Kuwari, and Ara Darzi

<u>As Oral Vaccines Fall Short In Low-Income Countries, Researchers Look For</u> Solutions

Carina Storrs

Eliminating Measles & Rubella

<u>DATAWATCH: Slow Progress In Finalizing Measles And Rubella Elimination In The European Region</u>

Robin Biellik, Iria Davidkin, Susanna Esposito, Andrey Lobanov, Mira Kojouharova, Günter Pfaff, José Ignacio Santos, John Simpson, Myriam Ben Mamou, Robb Butler, Sergei Deshevoi, Shahin Huseynov, Dragan Jankovic, and Abigail Shefer

ANALYSIS & COMMENTARY: Combining Global Elimination Of Measles And Rubella With Strengthening Of Health Systems In Developing Countries

Jon Kim Andrus, Stephen L. Cochi, Louis Z. Cooper, and Jonathan D. Klein

Attitudes Toward Vaccination

Exploring The Impact Of The US Measles Outbreak On Parental Awareness Of And Support For Vaccination

Michael A. Cacciatore, Glen Nowak, and Nathaniel J. Evans

<u>Publicly Available Online Tool Facilitates Real-Time Monitoring Of Vaccine Conversations And Sentiments</u>

Chi Y. Bahk, Melissa Cumming, Louisa Paushter, Lawrence C. Madoff, Angus Thomson, and John S. Brownstein

Children's Vaccination In The United States

ANALYSIS & COMMENTARY: A Tale Of Two States: Mississippi, West Virginia, And Exemptions To Compulsory School Vaccination Laws

James Colgrove and Abigail Lowin

<u>Since The Start Of The Vaccines For Children Program, Uptake Has Increased, And Most Disparities Have Decreased</u>

Brendan Walsh, Edel Doherty, and Ciaran O'Neill

Web First

DATAWATCH: Variation In Rural Health Information Technology Adoption And Use

Dawn M. Heisey-Grove

Health and Human Rights

Volume 17, Issue 2 December 2015

http://www.hhrjournal.org/

Special Issue: Evidence of the Impact of Human Rights-Based Approaches to Health

[Reviewed earlier]

Health Economics, Policy and Law

Volume 11 - Issue 01 - January 2016 http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue [Reviewed earlier]

Health Policy and Planning

Volume 31 Issue 1 February 2016 http://heapol.oxfordjournals.org/content/current [Reviewed earlier]

Health Research Policy and Systems

http://www.health-policy-systems.com/content

[Accessed 13 February 2016]

Research

A multiple case study of intersectoral public health networks: experiences and benefits of using research

Anita Kothari, Charmaine McPherson, Dana Gore, Benita Cohen, Marjorie MacDonald and Shannon L. Sibbald

Published on: 11 February 2016

Research

Setting priorities in health research using the model proposed by the World Health Organization: development of a quantitative methodology using tuberculosis in South Africa as a worked example

Damian Hacking and Susan Cleary Published on: 9 February 2016

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

Volume 12, Issue 1, 2016 http://www.tandfonline.com/toc/khvi20/current [Reviewed earlier]

Humanitarian Exchange Magazine

Number 65 November 2015 http://odihpn.org/wp-content/uploads/2015/10/HE_65_web.pdf **Special Feature: The Crisis in Iraq**

[Reviewed earlier]

Infectious Agents and Cancer

http://www.infectagentscancer.com/content [Accessed 13 February 2016] [No new relevant content]

Infectious Diseases of Poverty

http://www.idpjournal.com/content [Accessed 13 February 2016] [No new content]

International Health

Volume 8 Issue 1 January 2016 http://inthealth.oxfordjournals.org/content/current [Reviewed earlier]

International Journal of Epidemiology

Volume 44 Issue 6 December 2015 http://ije.oxfordjournals.org/content/current [Reviewed earlier]

International Journal of Infectious Diseases

January 2016 Volume 42, p1-74 http://www.ijidonline.com/issue/S1201-9712%2815%29X0012-9 [Reviewed earlier]

JAMA

February 9, 2016, Vol 315, No. 6 http://jama.jamanetwork.com/issue.aspx [New issue: No relevant content identified]

JAMA Pediatrics

February 2016, Vol 170, No. 2 http://archpedi.jamanetwork.com/issue.aspx [Reviewed earlier]

Journal of Community Health

February 2016, Issue 1, Pages 1-205 http://link.springer.com/journal/10900/41/1/page/1 [Reviewed earlier]

Journal of Epidemiology & Community Health

January 2016, Volume 70, Issue 1 http://jech.bmj.com/content/current [Reviewed earlier]

Journal of Global Ethics

Volume 11, Issue 3, 2015

http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8

Forum: The Sustainable Development Goals

[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

January-March 2016 Volume 8 | Issue 1 Page Nos. 1-56 http://www.jgid.org/currentissue.asp?sabs=n SPECIAL ARTICLE

The emergence of zika virus as a global health security threat: A review and a consensus statement of the INDUSEM Joint working Group (JWG)

DOI: 10.4103/0974-777X.176140

<u>Veronica Sikka</u>1, <u>Vijay Kumar Chattu</u>2, <u>Raaj K Popli</u>3, <u>Sagar C Galwankar</u>4, <u>Dhanashree Kelkar</u>4, <u>Stanley G Sawicki</u>5, <u>Stanislaw P Stawicki</u>6, <u>Thomas J Papadimos</u>7

- ¹ Department of Emergency Medicine, Veterans Affairs Medical Center, Orlando, USA
- ² Institute for International Relations, The University of West Indies, St. Augustine, Trinidad and Tobago, USA
- ³ Digestive Disease Consultants of Central Florida, Altamonte Springs, Florida, USA
- ⁴ Department of Emergency Medicine, University of Florida, Jacksonville, Florida, USA
- ⁵ Department of Medical Microbiology and Immunology, College of Medicine and the Life Sciences, University of Toledo, Toledo, USA
- ⁶ Department of Research and Innovation, St. Luke's University Health Network, Bethlehem, Pennsylvania, USA
- ⁷ Department of Anesthesiology, The Ohio State University College of Medicine, Columbus, Ohio, USA

Abstract

The Zika virus (ZIKV), first discovered in 1947, has emerged as a global public health threat over the last decade, with the accelerated geographic spread of the virus noted during the last 5 years. The World Health Organization (WHO) predicts that millions of cases of ZIKV are likely to occur in the Americas during the next 12 months. These projections, in conjunction with suspected Zika-associated increase in newborn microcephaly cases, prompted WHO to declare public health emergency of international concern. ZIKV-associated illness is characterized by an incubation period of 3-12 days. Most patients remain asymptomatic (i.e., ~80%) after contracting the virus. When symptomatic, clinical presentation is usually mild and consists of a self-limiting febrile illness that lasts approximately 2-7 days. Among common clinical manifestations are fever, arthralgia, conjunctivitis, myalgia, headache, and maculopapular rash. Hospitalization and complication rates are low, with fatalities being extremely rare. Newborn microcephaly, the most devastating and insidious complication associated with the ZIKV, has been described in the offspring of women who became infected while pregnant. Much remains to be elucidated about the timing of ZIKV infection in the context of the temporal progression of pregnancy, the corresponding *in utero* fetal development stage(s), and the risk of microcephaly. Without further knowledge of the pathophysiology involved, the true risk of ZIKV to the unborn remains difficult to quantify and remediate. Accurate, portable, and inexpensive point-of-care testing is required to better identify cases and manage the current and future outbreaks of ZIKV, including optimization of preventive approaches and the identification of more effective risk reduction strategies. In addition, much more work needs to be done to produce an effective vaccine. Given the rapid geographic spread of ZIKV in recent years, a coordinated local, regional, and global effort is needed to generate sufficient resources and political traction to effectively halt and contain further expansion of the current outbreak.

Journal of Health Care for the Poor and Underserved (JHCPU)

Volume 27, Number 1, February 2016
https://muse.jhu.edu/journals/journal of health care for the poor and underserved/toc/hpu.
27.1.html
[Reviewed earlier]

Journal of Immigrant and Minority Health

Volume 18, Issue 1, February 2016 http://link.springer.com/journal/10903/18/1/page/1 [Reviewed earlier]

Journal of Immigrant & Refugee Studies

Volume 13, Issue 4, 2015 http://www.tandfonline.com/toc/wimm20/current [Reviewed earlier]

Journal of Infectious Diseases

Volume 213 Issue 3 February 1, 2016 http://jid.oxfordjournals.org/content/current

[Reviewed earlier]

The Journal of Law, Medicine & Ethics

Winter 2015 Volume 43, Issue 4 Pages 673–913

http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-4/issuetoc

Special Issue: SYMPOSIUM: Harmonizing Privacy Laws to Enable International

Biobank Research: Part I

[14 articles] [Reviewed earlier]

Journal of Medical Ethics

February 2016, Volume 42, Issue 2 http://jme.bmj.com/content/current [Reviewed earlier]

Journal of Medical Microbiology

Volume 65, Issue 1, January 2016

http://jmm.microbiologyresearch.org/content/journal/jmm/65/1;jsessionid=1o1f1v54ood8i.x-sqm-live-03

[New issue; No relevant content identified]

Journal of Patient-Centered Research and Reviews

Volume 3, Issue 1 (2016) http://digitalrepository.aurorahealthcare.org/jpcrr/ [Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 4 Issue 4 December 2015 http://jpids.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Pediatrics

January 2016 Volume 168, p1-258 http://www.jpeds.com/current [Reviewed earlier]

Journal of Public Health Policy

Volume 37, Issue 1 (February 2016) http://www.palgrave-journals.com/jphp/journal/v37/n1/index.html [Reviewed earlier]

Journal of the Royal Society - Interface

01 January 2016; volume 13, issue 114 http://rsif.royalsocietypublishing.org/content/current [Reviewed earlier]

Journal of Virology

February 2016, volume 90, issue 3 http://jvi.asm.org/content/current [Reviewed earlier]

The Lancet

Feb 13, 2016 Volume 387 Number 10019 p619-716 e20 http://www.thelancet.com/journals/lancet/issue/current Editorial

Australia's immigration centres are no place for children

The Lancet

DOI: http://dx.doi.org/10.1016/S0140-6736(16)00317-2

Summary

Last week, the High Court in Australia ruled that the country was within its constitutional rights to detain asylum seekers offshore. This ruling is scandalously objectionable not only for the health and wellbeing of individuals seeking asylum or refuge in Australia, but also for the more than 260 people, including children, on the mainland who are now at risk of deportation.

Comment

A crucial time for public health preparedness: Zika virus and the 2016 Olympics, Umrah, and Hajj

Published Online: 06 February 2016

Habida Elachola, Ernesto Gozzer, Jiatong Zhuo, Ziad A Memish DOI: http://dx.doi.org/10.1016/S0140-6736(16)00274-9

Series

Ending preventable stillbirths

Stillbirths: recall to action in high-income countries

Vicki Flenady, Aleena M Wojcieszek, Philippa Middleton, David Ellwood, Jan Jaap Erwich, Michael Coory, T Yee Khong, Robert M Silver, Gordon C S Smith, Frances M Boyle, Joy E Lawn, Hannah Blencowe, Susannah Hopkins Leisher, Mechthild M Gross, Dell Horey, Lynn Farrales, Frank Bloomfield, Lesley McCowan, Stephanie J Brown, K S Joseph, Jennifer Zeitlin, Hanna E Reinebrant, Claudia Ravaldi, Alfredo Vannacci, Jillian Cassidy, Paul Cassidy, Cindy Farquhar, Euan Wallace, Dimitrios Siassakos, Alexander E P Heazell, Claire Storey, Lynn Sadler, Scott Petersen, J Frederik Frøen, Robert L Goldenberg, The Lancet Ending Preventable Stillbirths study group, The Lancet Stillbirths In High-Income Countries Investigator Group

Ending preventable stillbirths

Stillbirths: ending preventable deaths by 2030

Luc de Bernis, Mary V Kinney, William Stones, Petra ten Hoope-Bender, Donna Vivio, Susannah Hopkins Leisher, Zulfiqar A Bhutta, Metin Gülmezoglu, Matthews Mathai, Jose M Belizán, Lynne Franco, Lori McDougall, Jennifer Zeitlin, Address Malata, Kim E Dickson, Joy E Lawn, The Lancet Ending Preventable Stillbirths Series study group, The Lancet Ending Preventable Stillbirths Series Advisory Group

The Lancet Infectious Diseases

Feb 2016 Volume 16 Number 2 p131-264 e10-e21 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

Lancet Global Health

Feb 2016 Volume 4 Number 2 e69-e136 http://www.thelancet.com/journals/langlo/issue/current Editorial

Stillbirths: still neglected?

Zoë Mullan Summarv

5 years ago, The Lancet published a groundbreaking (and taboo-breaking) Series on stillbirths. Its powerful mix of advocacy and hard data attracted more media attention than perhaps any other Series, and made waves on numerous levels, from the individual to the intergovernmental. Working closely with countries and WHO, the Series authors fought to bring "out of the shadows" the unacceptable toll of intrapartum stillbirths in low-income countries, the addressable differences in stillbirth rates between countries with advanced health systems, and the deplorable absence of such devastating events from global tracking efforts such as those of the UN, the Millennium Development Goals, and the Global Burden of Disease.

Comment

<u>Success of rotavirus vaccination in Africa: good news and remaining questions</u> Timo Vesikari

Borders and migration: an issue of global health importance

James Smith, Leigh Daynes

Articles

National, regional, and worldwide estimates of stillbirth rates in 2015, with trends from 2000: a systematic analysis

Hannah Blencowe, Simon Cousens, Fiorella Bianchi Jassir, Lale Say, Doris Chou, Colin Mathers, Dan Hogan, Suhail Shiekh, Zeshan U Qureshi, Danzhen You, Joy E Lawn, The Lancet Stillbirth Epidemiology Investigator Group

Summary

Background

Previous estimates have highlighted a large global burden of stillbirths, with an absence of reliable data from regions where most stillbirths occur. The Every Newborn Action Plan (ENAP) targets national stillbirth rates (SBRs) of 12 or fewer stillbirths per 1000 births by 2030. We estimate SBRs and numbers for 195 countries, including trends from 2000 to 2015.

Methods

We collated SBR data meeting prespecified inclusion criteria from national routine or registration systems, nationally representative surveys, and other data sources identified through a systematic review, web-based searches, and consultation with stillbirth experts. We modelled SBR (≥28 weeks' gestation) for 195 countries with restricted maximum likelihood estimation with country-level random effects. Uncertainty ranges were obtained through a bootstrap approach.

Findings

Data from 157 countries (2207 datapoints) met the inclusion criteria, a 90% increase from 2009 estimates. The estimated average global SBR in 2015 was 18·4 per 1000 births, down from 24·7 in 2000 (25·5% reduction). In 2015, an estimated 2·6 million (uncertainty range 2·4–3·0 million) babies were stillborn, giving a 19% decline in numbers since 2000 with the slowest progress in sub-Saharan Africa. 98% of all stillbirths occur in low-income and middle-income countries; 77% in south Asia and sub-Saharan Africa.

Interpretation

Progress in reducing the large worldwide stillbirth burden remains slow and insufficient to meet national targets such as for ENAP. Stillbirths are increasingly being counted at a local level, but countries and the global community must further improve the quality and comparability of data, and ensure that this is more clearly linked to accountability processes including the Sustainable Development Goals.

Funding

Save the Children's Saving Newborn Lives programme to The London School of Hygiene & Tropical Medicine.

Effect of pentavalent rotavirus vaccine introduction on hospital admissions for diarrhoea and rotavirus in children in Rwanda: a time-series analysis

Fidele Ngabo, Jacqueline E Tate, Maurice Gatera, Celse Rugambwa, Philippe Donnen, Philippe Lepage, Jason M Mwenda, Agnes Binagwaho, Umesh D Parashar *Summary*

Background

In May, 2012, Rwanda became the first low-income African country to introduce pentavalent rotavirus vaccine into its routine national immunisation programme. Although the potential health benefits of rotavirus vaccination are huge in low-income African countries that account for more than half the global deaths from rotavirus, concerns remain about the performance of oral rotavirus vaccines in these challenging settings.

Methods

We conducted a time-series analysis to examine trends in admissions to hospital for non-bloody diarrhoea in children younger than 5 years in Rwanda between Jan 1, 2009, and Dec 31, 2014, using monthly discharge data from the Health Management Information System. Additionally, we reviewed the registries in the paediatric wards at six hospitals from 2009 to 2014 and abstracted the number of total admissions and admissions for diarrhoea in children younger than 5 years by admission month and age group. We studied trends in admissions specific to rotavirus at one hospital that had undertaken active rotavirus surveillance from 2011 to 2014. We assessed changes in rotavirus epidemiology by use of data from eight active surveillance hospitals.

Findings

Compared with the 2009–11 prevaccine baseline, hospital admissions for non-bloody diarrhoea captured by the Health Management Information System fell by 17–29% from a pre-vaccine

median of 4051 to 2881 in 2013 and 3371 in 2014, admissions for acute gastroenteritis captured in paediatric ward registries decreased by 48–49%, and admissions specific to rotavirus captured by active surveillance fell by 61–70%. The greatest effect was recorded in children age-eligible to be vaccinated, but we noted a decrease in the proportion of children with diarrhoea testing positive for rotavirus in almost every age group. Interpretation

The number of admissions to hospital for diarrhoea and rotavirus in Rwanda fell substantially after rotavirus vaccine implementation, including among older children age-ineligible for vaccination, suggesting indirect protection through reduced transmission of rotavirus. These data highlight the benefits of routine vaccination against rotavirus in low-income settings. Funding

Gavi, the Vaccine Alliance and the Government of Rwanda.

Maternal and Child Health Journal

Volume 20, Issue 2, February 2016 http://link.springer.com/journal/10995/20/2/page/1 [Reviewed earlier]

Medical Decision Making (MDM)

February 2016; 36 (2) http://mdm.sagepub.com/content/current [New issue; No relevant content identified]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy
December 2015 Volume 93, Issue 4 Pages 651–883
http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2015.93.issue-4/issuetoc
[New issue; No relevant content identified]

Nature

Volume 530 Number 7589 pp129-248 11 February 2016 http://www.nature.com/nature/current issue.html Editorials

Benefits of sharing

A swift and effective response to emerging infectious diseases demands that researchers have ready access to the latest data on the pathogens responsible. There is still a long way to go to ensure this.

Nature Medicine

February 2016, Volume 22 No 2 pp115-217 http://www.nature.com/nm/journal/v22/n2/index.html Nature Medicine / Editorial A windfall for US biomedical science doi:10.1038/nm.4048 Published online 04 February 2016

In December, the US government approved a \$2 billion increase in the budget of the US National Institutes of Health (NIH) for the 2016 fiscal year. With that increase comes relief, optimism and the pressure to spend wisely.

Nature Reviews Immunology

February 2016, Volume 22 No 2 pp115-217 http://www.nature.com/nm/journal/v22/n2/index.html [New issue; No relevant content identified]

New England Journal of Medicine

February 11, 2016 Vol. 374 No. 6 http://www.nejm.org/toc/nejm/medical-journal Perspective

A World Free of Polio — The Final Steps

Manish Patel, M.D., and Walter Orenstein, M.D. N Engl J Med 2016; 374:501-503 February 11, 2016

l Ebluary 11, 2010

DOI: 10.1056/NEJMp1514467

Audio Interview

Interview with Dr. Walter Orenstein on the final steps in the global effort to eradicate polio. (8:37) Listen Download

Global polio-eradication efforts have led to a dramatic decrease in polio cases, from an estimated 350,000 cases in 125 countries in 1988 to 72 cases in 2015. As of January 2016, endemic transmission of polio caused by wild polioviruses (WPVs) had been interrupted in all countries except Pakistan and Afghanistan. Indeed, the Global Commission for Certification of the Eradication of Poliomyelitis recently certified that type 2 wild poliovirus, one of three strains responsible for centuries of human paralysis and disfigurement, has been eradicated. Type 2 poliovirus now exists only in laboratories and in trivalent oral polio vaccine (tOPV) in an attenuated form, though in rare circumstances it surfaces in the community, through persistent transmission, in the form of outbreaks of vaccine-derived viruses. Getting to this point has not been easy. Sustaining our wins and traversing the last mile of the eradication journey calls for escalation of global immunization activities on an unprecedented scale.

Oral polio vaccine (OPV) has been the lynchpin of successful control of paralytic polio. However, in very rare instances, it has been associated with cases of paralysis caused by vaccine-associated paralytic polio (VAPP) or circulating vaccine-derived polioviruses (cVDPVs) — the latter when the viruses included in the vaccine have mutated over time, acquiring the neurovirulence and transmissibility of WPV. For this reason, it is of paramount importance to discontinue the use of OPV after polio eradication has been certified. Since the last case of naturally occurring type 2 WPV in 1999, continued use of OPV2 (the type 2 component of tOPV) has paralyzed an estimated 1600 to 3200 people with VAPP and more than 600 people with type 2 cVDPV. Because routine use of type 2—containing vaccine is no longer needed, the

global community has a moral imperative to discontinue it as soon as programmatically feasible. Because WPV types 1 and 3 have not yet been eradicated, however, the phased withdrawal of OPV antigens will begin with a shift from tOPV (containing types 1, 2, and 3) to bivalent OPV (bOPV, containing types 1 and 3).

Global cessation of OPV2 use poses a low but real risk of outbreaks of cVDPV2 or WPV infections associated with declining immunity to type 2 poliovirus. The overarching strategy for reducing this risk is to maximize immunity against type 2 before and after withdrawal of the vaccine and to prepare for an appropriate outbreak response. Doing so requires a comprehensive, multipronged approach (see <u>table</u> Risks and Risk-Mitigation Strategies for Switching from Trivalent Oral Polio Vaccine (tOPV) to Bivalent OPV (bOPV).).

First, it is important to stop current cVDPV2 outbreaks in advance of the switch, through aggressive tOPV vaccination in any place where cVDPV2 is detected. Programs with lower routine coverage will have to boost type 2 immunity through additional tOPV campaigns just before OPV2 withdrawal. A high level of immunity, especially OPV2-induced intestinal immunity, will prevent sustained transmission of vaccine viruses, which could lead to generation of new cVDPV2s.

Second, all countries should have access to enough inactivated polio vaccine (IPV) to administer at least one dose to all children through the routine immunization program. IPV provides immunity against all three polioviruses without generating any infectious vaccine-associated polioviruses. Introduction of IPV is intended to provide some immunity against type 2 viruses in new birth cohorts to mitigate future outbreaks of type 2 WPV and type 2 cVDPVs, should the viruses be reintroduced. IPV, however, may not prevent cVDPV2 emergence, which will be greatest during the first 6 to 12 months after OPV2 withdrawal.

Third, there had to be certified eradication of type 2 WPV, which has been accomplished.

Fourth, all countries must have destroyed type 2 WPV or securely contain it in essential laboratory and vaccine-production facilities by the end of 2015 and must do the same with OPV2 within 3 months after it is withdrawn.

Fifth, a global stockpile of monovalent type 2 OPV should be available to control outbreaks of type 2 polio, should type 2 viruses be reintroduced.

Finally, leaders of the Global Polio Eradication Initiative (GPEI) should finalize a protocol for surveillance of and response to such outbreaks.

Recently, the Strategic Advisory Group of Experts on Immunization (SAGE) reviewed progress on these readiness indicators. 1,4 All high-risk countries are on track for introducing IPV. Supply shortages will delay introduction by a few months in some low-risk countries but are unlikely to increase the short-term risk of cVDPV2. SAGE also recommended accelerating implementation of the containment plan. Overall, it determined that the benefits of withdrawing OPV2 outweighed the risks, reaffirming the decision to proceed with the global switch from tOPV to bOPV between April 17 and May 1, 2016. Furthermore, it reiterated that OPV2 withdrawal must be synchronized worldwide. A prolonged, staggered withdrawal would pose a risk of continuous generation of cVDPV2s and potential exportation of these viruses to regions or countries with

susceptible children born after the switch. Withdrawal of OPV2 during the seasonally low-transmission month of April further reduces the risk of type 2 polio outbreaks.

Switching from tOPV to bOPV may sound simple, but synchronization requires global coordination on an unprecedented scale. To use bOPV in routine immunization, all countries must either license a bivalent vaccine or accept one that is prequalified by the World Health Organization. Recent trial data and use of bOPV in campaigns since 2009 indicate that it is safe and more immunogenic to types 1 and 3 than is tOPV. Multilevel efforts to manage the global supply of OPV have begun, including discontinuation of tOPV production, scale-up of bOPV production, initiation of interactions between procurement agencies or manufacturers and countries, management of countrywide tOPV inventories to ensure that stocks are adequate until the switch and to track collection and destruction afterward, and allocation of funds for procuring bOPV. Fundamentally, countries will strive to avoid having either excess or insufficient quantities of tOPV leading up to the switch and to ensure the availability of bOPV after the switch.

Coordinated communication among global health organizations, countries, manufacturers, and funders is imperative to ensure synchronized OPV2 withdrawal with minimal disruption in vaccination services to children worldwide. Successful synchronization also requires GPEI leaders and countries to monitor the timely completion of preparatory steps both globally and within each country (e.g., managing of tOPV inventories; bOPV licensure, procurement, and shipment; securing of financial resources; establishment of communication; and training of logisticians, health workers, and monitors). Equally, if not more, important, however, will be the monitoring of outcomes of withdrawal of the vaccine in April 2016. Although it is nearly impossible to monitor every vaccination service point — India alone has more than 26,000 — a targeted monitoring strategy for high-risk areas, such as facilities storing large stocks of tOPV, could provide further reassurance of low risk of cVDPV2 reemergence. Countries will need to dispose of residual tOPV stocks using their existing pharmaceutical-waste-disposal procedures to avoid continued use of the discontinued vaccine.

More preparation for the switch is required in the coming months, and for completing polio eradication in the coming years. But collaboration in eradication efforts has reached a high point never before achieved by the immunization community. Getting here has required tireless effort and practical innovation in science, policy, and implementation. Capitalizing on the gains made to date should push overall polio eradication over the finish line and may pave the way for measles eradication and future global health initiatives.

Pediatrics

February 2016, VOLUME 137 / ISSUE 2 http://pediatrics.aappublications.org/content/137/2?current-issue=y

Articles

Primary Care Physicians' Perspectives About HPV Vaccine

Mandy A. Allison, Laura P. Hurley, Lauri Markowitz, Lori A. Crane, Michaela Brtnikova, Brenda L. Beaty, Megan Snow, Janine Cory, Shannon Stokley, Jill Roark, Allison Kempe Pediatrics Feb 2016, 137 (2) 1-9; DOI: 10.1542/peds.2015-2488

Abstract

BACKGROUND AND OBJECTIVES: Because physicians' practices could be modified to reduce missed opportunities for human papillomavirus (HPV) vaccination, our goal was to: (1) describe self-reported practices regarding recommending the HPV vaccine; (2) estimate the frequency of parental deferral of HPV vaccination; and (3)identify characteristics associated with not discussing it.

METHODS: A national survey among pediatricians and family physicians (FP) was conducted between October 2013 and January 2014. Using multivariable analysis, characteristics associated with not discussing HPV vaccination were examined.

RESULTS: Response rates were 82% for pediatricians (364 of 442) and 56% for FP (218 of 387). For 11-12 year-old girls, 60% of pediatricians and 59% of FP strongly recommend HPV vaccine; for boys,52% and 41% ostrongly recommen. More than one-half reported \geq 25% of parents deferred HPV vaccination. At the 11-12 year well visit, 84% of pediatricians and 75% of FP frequently/always discuss HPV vaccination. Compared with physicians who frequently/always discuss , those who occasionally/rarely discuss(18%) were more likely to be FP (adjusted odds ratio [aOR]: 2.0 [95% confidence interval (CI): 1.1–3.5), be male (aOR: 1.8 [95% CI: 1.1–3.1]), disagree that parents will accept HPV vaccine if discussed with other vaccines (aOR: 2.3 [95% CI: 1.3–4.2]), report that 25% to 49% (aOR: 2.8 [95% CI: 1.1–6.8]) or \geq 50% (aOR: 7.8 [95% CI: 3.4–17.6]) of parents defer, and express concern about waning immunity (aOR: 3.4 [95% CI: 1.8–6.4]).

CONCLUSIONS: Addressing physicians' perceptions about parental acceptance of HPV vaccine, the possible advantages of discussing HPV vaccination with other recommended vaccines, and concerns about waning immunity could lead to increased vaccination rates

Seasonal Effectiveness of Live Attenuated and Inactivated Influenza Vaccine

Jessie R. Chung, Brendan Flannery, Mark G. Thompson, Manjusha Gaglani, Michael L. Jackson, Arnold S. Monto, Mary Patricia Nowalk, H. Keipp Talbot, John J. Treanor, Edward A. Belongia, Kempapura Murthy, Lisa A. Jackson, Joshua G. Petrie, Richard K. Zimmerman, Marie R. Griffin, Huong Q. McLean, Alicia M. Fry

Pediatrics Feb 2016, 137 (2) 1-10; DOI: 10.1542/peds.2015-3279

Safety and Immunogenicity of Sequential Rotavirus Vaccine Schedules

Romina Libster, Monica McNeal, Emmanuel B. Walter, Andi L. Shane, Patricia Winokur, Gretchen Cress, Andrea A. Berry, Karen L. Kotloff, Kwabena Sarpong, Christine B. Turley, Christopher J. Harrison, Barbara A. Pahud, Jyothi Marbin, John Dunn, Jill El-Khorazaty, Jill Barrett, Kathryn M. Edwards, for the VTEU Rotavirus Vaccine Study Work Group

Pediatrics Feb 2016, 137 (2) 1-10; DOI: 10.1542/peds.2015-2603

From the American Academy of Pediatrics

<u>Medical Countermeasures for Children in Public Health Emergencies, Disasters, or Terrorism</u>

DISASTER PREPAREDNESS ADVISORY COUNCIL

Pediatrics Feb 2016, 137 (2) 1-9; DOI: 10.1542/peds.2015-4273 *Abstract*

Significant strides have been made over the past 10 to 15 years to develop medical countermeasures (MCMs) to address potential disaster hazards, including chemical, biological, radiologic, and nuclear threats. Significant and effective collaboration between the pediatric health community, including the American Academy of Pediatrics, and federal partners, such as the Office of the Assistant Secretary for Preparedness and Response, Centers for Disease

Control and Prevention, Federal Emergency Management Agency, National Institutes of Health, Food and Drug Administration, and other federal agencies, over the past 5 years has resulted in substantial gains in addressing the needs of children related to disaster preparedness in general and MCMs in particular. Yet, major gaps still remain related to MCMs for children, a population highly vulnerable to the effects of exposure to such threats, because many vaccines and pharmaceuticals approved for use by adults as MCMs do not yet have pediatric formulations, dosing information, or safety information. As a result, the nation's stockpiles and other caches (designated supply of MCMs) where pharmacotherapeutic and other MCMs are stored are less prepared to address the needs of children compared with those of adults in the event of a disaster. This policy statement provides recommendations to close the remaining gaps for the development and use of MCMs in children during public health emergencies or disasters. The progress made by federal agencies to date to address the needs of children and the shared commitment of collaboration that characterizes the current relationship between the pediatric health community and the federal agencies responsible for MCMs should encourage all child advocates to invest the necessary energy and resources now to complete the process of remedying the remaining significant gaps in preparedness.

Pediatrics Perspectives

Planning for Research on Children During Public Health Emergencies

Laura J. Faherty, Sonja A. Rasmussen, Nicole Lurie Pediatrics Feb 2016, 137 (2) 1-4; DOI: 10.1542/peds.2015-3611 Extract

The recent Ebola epidemic exposed critical knowledge gaps about the disease and its impact on different populations, particularly children, which hindered the public health and medical response. For instance, unanswered questions remain about the natural history of Ebola virus disease in young children and its transmissibility in breast milk. Other emerging infectious diseases, such as Middle East Respiratory Syndrome (MERS), remind us that there will always be another pathogen lurking around the corner. Public health emergencies (PHEs) resulting from natural disasters are increasing in ferocity and frequency.1 How can we ensure that we address our current knowledge gaps to better prepare for future disasters? Awareness of the need to integrate scientific research into PHE response is growing, 2 but the discussion of research involving children has been limited. Although several efforts have addressed the unique physical and socio-emotional needs of children in PHEs,3,4 pediatric research during PHEs has been lacking, resulting in significant knowledge gaps for children compared to adults. Conducting research, especially in children, without interfering with the PHE response is challenging. The present article discusses the importance of including children in PHE research and proposes components of a robust infrastructure that need to be in place to facilitate this research.

Barriers to Including Children in PHE Research

Including children in PHE research presents special challenges, including issues with recruitment, informed consent, and enrollment.3,5 Institutional review boards (IRBs) have more stringent requirements for inclusion of children in research than for adults.6 A life course ...

<u>Stakeholder Views of Clinical Trials in Low- and Middle-Income Countries: A</u> Systematic Review

Pathma D. Joseph, Patrina H.Y. Caldwell, Allison Tong, Camilla S. Hanson, Jonathan C. Craig Pediatrics Feb 2016, 137 (2) 1-19; DOI: 10.1542/peds.2015-2800 Abstract CONTEXT: Clinical trials are necessary to improve the health care of children, but only one-quarter are conducted in the low- to middle-income countries (LMICs) in which 98% of the global burden of disease resides.

OBJECTIVE: To describe stakeholder beliefs and experiences of conducting trials in children in LMICs.

DATA SOURCES: Electronic databases were searched to August 2014.

STUDY SELECTION: Qualitative studies of stakeholder perspectives on conducting clinical trials among children in LMICs.

DATA EXTRACTION: Findingswere analyzed by using thematic synthesis.

RESULTS: Thirty-nine studies involving 3110 participants (children [n = 290], parents or caregivers [n = 1609], community representatives [n = 621], clinical or research team members [n = 376], regulators [n = 18], or sponsors [n = 15]) across 22 countries were included. Five themes were identified: centrality of community engagement (mobilizing community, representatives' pivotal role, managing expectations, and retaining involvement); cognizance of vulnerability and poverty (therapeutic opportunity and medical mistrust); contending with power differentials (exploitation, stigmatization, and disempowerment); translating research to local context (cultural beliefs, impoverishment constraints, and ethical pluralism); and advocating fair distribution of benefits (health care, sponsor obligation, and collateral community benefits).

LIMITATIONS: Studies not published in English were excluded.

CONCLUSIONS: Conducting trials in children in LMICs is complex due to social disadvantage, economic scarcity, idiosyncratic cultural beliefs, and historical disempowerment, all of which contribute to inequity, mistrust, and fears of exploitation. Effective community engagement in recruiting, building research capacities, and designing trials that are pragmatic, ethical, and relevant to the health care needs of children in LMICs may help to improve the equity and health outcomes of this vulnerable population.

Commentaries

Rotavirus Vaccines—OK to Mix and Match

Carrie L. Byington, Yvonne Maldonado

Pediatrics Feb 2016, 137 (2) 1-2; DOI: 10.1542/peds.2015-3618

Pharmaceutics

<u>Volume 7</u>, Issue 4 (December 2015), Pages 363-564 http://www.mdpi.com/1999-4923/7/4 [Reviewed earlier]

PharmacoEconomics

Volume 34, Issue 1, January 2016 http://link.springer.com/journal/40273/33/12/page/1 [Reviewed earlier]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 13 February 2016]

[No new content]

PLoS Currents: Outbreaks

http://currents.plos.org/outbreaks/ (Accessed 13 February 2016) [No new content]

PLoS Medicine

http://www.plosmedicine.org/ (Accessed 13 February 2016) [No new relevant content]

PLoS Neglected Tropical Diseases

http://www.plosntds.org/ (Accessed 13 February 2016) [No new relevant content]

PLoS One

http://www.plosone.org/ [Accessed 13 February 2016]

<u>Long-Term Protection against Diphtheria in the Netherlands after 50 Years of Vaccination: Results from a Seroepidemiological Study</u>

E. M. Swart, P. G. M. van Gageldonk, H. E. de Melker, F. R. van der Klis, G. A. M. Berbers, L. Mollema

Research Article | published 10 Feb 2016 | PLOS ONE 10.1371/journal.pone.0148605

PLoS Pathogens

http://journals.plos.org/plospathogens/ (Accessed 13 February 2016) [No new relevant content]

PNAS - Proceedings of the National Academy of Sciences of the United States of America

http://www.pnas.org/content/early/ (Accessed 13 February 2016) [No new relevant content]

Pneumonia

Vol 6 (2015)

https://pneumonia.org.au/index.php/pneumonia/issue/current

[Reviewed earlier]

Prehospital & Disaster Medicine

Volume 31 - Issue 01 - February 2016 https://journals.cambridge.org/action/displayIssue?jid=PDM&tab=currentissue [Reviewed earlier]

Preventive Medicine

Volume 83, Pages 1-76 (February 2016)
http://www.sciencedirect.com/science/journal/00917435/83
[New issue; No relevant content identified]

Proceedings of the Royal Society B

10 February 2016; volume 283, issue 1824 http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y [New issue; No relevant content identified]

Public Health Ethics

Volume 8 Issue 3 November 2015 http://phe.oxfordjournals.org/content/current **Special Symposium: Antimicrobial Resistance** [Reviewed earlier]

Public Health Reports

Volume 131 , Issue Number 1 January/February 2016 http://www.publichealthreports.org/issuecontents.cfm?Volume=131&Issue=1 [Reviewed earlier]

Qualitative Health Research

February 2016; 26 (3) http://qhr.sagepub.com/content/current

**Special Issue: Qualitative Meta-Analysis

[Reviewed earlier]

Reproductive Health

http://www.reproductive-health-journal.com/content [Accessed 13 February 2016] [No new relevant content]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)

September 2015 Vol. 38, No. 3 http://www.paho.org/journal/ [Reviewed earlier]

Risk Analysis

January 2016 Volume 36, Issue 1 Pages 1–181 http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-1/issuetoc [Reviewed earlier]

Science

12 February 2016 Vol 351, Issue 6274 http://www.sciencemag.org/current.dtl [New issue; No relevant content identified]

Social Science & Medicine

Volume 150, Pages 1-290 (February 2016) http://www.sciencedirect.com/science/journal/02779536/150 [Reviewed earlier]

Tropical Medicine and Health

Vol. 43(2015) No. 4 https://www.jstage.jst.go.jp/browse/tmh/43/0/ contents [Reviewed earlier]

Tropical Medicine & International Health

February 2016 Volume 21, Issue 2 Pages 157–291 http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-2/issuetoc [Reviewed earlier]

Vaccine

Volume 34, Issue 8, Pages 995-1138 (17 February 2016) http://www.sciencedirect.com/science/journal/0264410X/34/8 Conference report

Workshop report: Schistosomiasis vaccine clinical development and product characteristics

Pages 995-1001

Annie X. Mo, Daniel G. Colley

Reviews

The 5As: A practical taxonomy for the determinants of vaccine uptake

Review Article Pages 1018-1024

Angus Thomson, Karis Robinson, Gaëlle Vallée-Tourangeau

Abstract

Suboptimal vaccine uptake in both childhood and adult immunisation programs limits their full potential impact on global health. A recent progress review of the Global Vaccine Action Plan stated that "countries should urgently identify barriers and bottlenecks and implement targeted approaches to increase and sustain coverage". However, vaccination coverage may be determined by a complex mix of demographic, structural, social and behavioral factors. To develop a practical taxonomy to organise the myriad possible root causes of a gap in vaccination coverage rates, we performed a narrative review of the literature and tested whether all non-socio-demographic determinants of coverage could be organised into 4 dimensions: Access, Affordability, Awareness and Acceptance. Forty-three studies were reviewed, from which we identified 23 primary determinants of vaccination uptake. We identified a fifth domain, Activation, which captured interventions such as SMS reminders which effectively nudge people towards getting vaccinated. The 5As taxonomy captured all identified determinants of vaccine uptake. This intuitive taxonomy has already facilitated mutual understanding of the primary determinants of suboptimal coverage within inter-sectorial working groups, a first step towards them developing targeted and effective solutions.

Regular Papers

Reciprocal interference of maternal and infant immunization in protection against pertussis

Original Research Article

Pages 1062-1069

Pascal Feunou Feunou, Nathalie Mielcarek, Camille Locht

Abstract

Background

Because of the current re-emergence of pertussis, vaccination during the 3rd trimester of pregnancy is recommended in several countries in order to protect neonates by placental transfer of maternal antibodies. Here, we examined the potential reciprocal interference of mother and infant vaccination in protection against pertussis in mice.

Methods

Female mice were vaccinated with acellular pertussis vaccines and protection against Bordetella pertussis challenge, as well as functional antibodies were measured in their offspring with or without re-vaccination.

Results

Maternal immunization protected the offspring against B. pertussis challenge, but protection waned quickly and was lost after vaccination of the infant mice with the same vaccine. Without affecting antibody titers, infant vaccination reduced the protective functions of maternally-derived antibodies, evidenced both in vitro and in vivo. Protection induced by infant vaccination was also affected by maternal antibodies. However, when mothers and infants were immunized with two different vaccines, no interference of infant vaccination on the protective effects of maternal antibodies was noted.

Conclusion

It may be important to determine the functionality of antibodies to evaluate potential interference of maternal and infant vaccination in protection against pertussis.

<u>Factors associated with a successful expansion of influenza vaccination among pregnant women in Nicaragua</u>

Original Research Article

Pages 1086-1090

Carmen S. Arriola, Nancy Vasconez, Mark Thompson, Sara Mirza, Ann C. Moen, Joseph Bresee, Ivy Talavera, Alba María Ropero

Abstract

Background

Pregnant women are at risk of severe influenza disease and are a priority group for influenza vaccination programs. Nicaragua expanded recommendations to include influenza vaccination to all pregnant women in the municipality of Managua in 2013.

Methods

We carried out a survey among 1,807 pregnant women who delivered at public hospitals in the municipality of Managua to evaluate the uptake of influenza vaccination and factors associated with vaccination.

Results

We observed a high (71%) uptake of influenza vaccination among this population, with no differences observed by age, education or parity of the women. Having four antenatal visits and five or more visits were associated with receipt of influenza vaccination (AORs: 2.58; 95% CI: 1.15, 5.81, and 2.37; 95% CI: 1.12, 5.0, respectively). Also, receipt of influenza vaccination recommendation from a health care provider was positively associated with receipt of influenza vaccination (AOR: 14.22; 95% CI: 10.45, 19.33).

Conclusions

The successful expansion of influenza vaccination among pregnant women in the municipality of Managua may be due to ready access to free medical care and health care providers' recommendation for vaccination at health care clinics that received influenza vaccine.

The actual and potential costs of meningitis surveillance in the African meningitis belt: Results from Chad and Niger

Original Research Article

Pages 1133-1138

Maite Irurzun-Lopez, Ngozi A. Erondu, Ali Djibo, Ulla Griffiths, James M. Stuart, Katya Fernandez, Olivier Ronveaux, Jean-Bernard Le Gargasson, Bradford D. Gessner, Anaïs Colombini *Abstract*

Background

The introduction of serogroup A meningococcal conjugate vaccine in the African meningitis belt required strengthened surveillance to assess long-term vaccine impact. The costs of implementing this strengthening had not been assessed.

Methodology

The ingredients approach was used to retrospectively determine bacterial meningitis surveillance costs in Chad and Niger in 2012. Resource use and unit cost data were collected through interviews with staff at health facilities, laboratories, government offices and international partners, and by reviewing financial reports. Sample costs were extrapolated to national level and costs of upgrading to desired standards were estimated. Results

Case-based surveillance had been implemented in all 12 surveyed hospitals and 29 of 33 surveyed clinics in Niger, compared to six out of 21 clinics surveyed in Chad. Lumbar punctures were performed in 100% of hospitals and clinics in Niger, compared to 52% of the clinics in

Chad. The total costs of meningitis surveillance were US\$ 1,951,562 in Niger and US\$ 338,056 in Chad, with costs per capita of US\$ 0.12 and US\$ 0.03, respectively. Laboratory investigation was the largest cost component per surveillance functions, comprising 51% of the total costs in Niger and 40% in Chad. Personnel resources comprised the biggest expense type: 37% of total costs in Niger and 26% in Chad. The estimated annual, incremental costs of upgrading current systems to desired standards were US\$ 183,299 in Niger and US\$ 605,912 in Chad, which are 9% and 143% of present costs, respectively.

Conclusions

Niger's more robust meningitis surveillance system costs four times more per capita than the system in Chad. Since Chad spends less per capita, fewer activities are performed, which weakens detection and analysis of cases. Countries in the meningitis belt are diverse, and can use these results to assess local costs for adapting surveillance systems to monitor vaccine impact.

Vaccines — Open Access Journal

http://www.mdpi.com/journal/vaccines (Accessed 13 February 2016) [No new content]

Value in Health

January 2016 Volume 19, Issue 1, p1-122 http://www.valueinhealthjournal.com/current [Reviewed earlier]

* * * *

<u>From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary</u>

Therapeutic Advances in Vaccines

Published online before print February 4, 2016,

<u>Intentions to receive a potentially available Lyme disease vaccine in an urban sample</u>

doi: 10.1177/2051013616629881

Joshua Fogel

Department of Business Management, Brooklyn College of the City University of New York, 218A, 2900 Bedford Avenue, Brooklyn, NY 11210, USA

Martin Kusz

Department of Biology, Brooklyn College, Brooklyn, NY, USA

Abstract

Objectives: The only human Lyme disease vaccine of LYMErix was voluntarily removed from the market in the United States in 2002 for a number of reasons. A new human Lyme disease vaccine is currently being developed. We would like any future approved human Lyme disease vaccine to be of interest and marketable to consumers.

Methods: We surveyed 714 participants to determine variables associated with intentions to receive a Lyme disease vaccine. Predictor variables included demographics, protection

motivational theory, Lyme disease knowledge, Lyme disease preventive behaviors, beliefs and perceived health.

Results: We found in multivariate linear regression analyses that Asian/Asian American race/ethnicity (p < 0.001), South Asian race/ethnicity (p = 0.01) and coping appraisal variables of response efficacy (p < 0.001) and self-efficacy (p < 0.001) were each significantly associated with increased intentions. The belief that vaccines are typically not safe was significantly associated with decreased intentions (p = 0.03).

Conclusions: Asian/Asian American and South Asian race/ethnicities have a strong interest in receiving a Lyme disease vaccine. Although pharmaceutical companies may benefit by advertising a Lyme disease vaccine to Asian/Asian Americans and South Asians, marketers need to address and use approaches to interest those from other race/ethnicities. Also, marketers need to address the erroneous belief that vaccines are typically not safe in order to interest those with such beliefs to use a Lyme disease vaccine.

Current Opinion in Applied Health Economics and Health Policy

First online: 30 January 2016

<u>Methodological Challenges to Economic Evaluations of Vaccines: Is a Common Approach Still Possible?</u>

Mark Jit, Raymond Hutubessy 10.1007/s40258-016-0224-7

Abstract

Economic evaluation of vaccination is a key tool to inform effective spending on vaccines. However, many evaluations have been criticised for failing to capture features of vaccines which are relevant to decision makers. These include broader societal benefits (such as improved educational achievement, economic growth and political stability), reduced health disparities, medical innovation, reduced hospital beds pressures, greater peace of mind and synergies in economic benefits with non-vaccine interventions. Also, the fiscal implications of vaccination programmes are not always made explicit. Alternative methodological frameworks have been proposed to better capture these benefits. However, any broadening of the methodology for economic evaluation must also involve evaluations of non-vaccine interventions, and hence may not always benefit vaccines given a fixed health-care budget. The scope of an economic evaluation must consider the budget from which vaccines are funded, and the decision-maker's stated aims for that spending to achieve.

Key Points for Decision Makers

- :: Economic evaluations of vaccines usually fail to capture all the societal benefits of vaccination.
- :: Broadening the benefits considered must also involve evaluations of non-vaccine interventions and hence may not always benefit vaccines given a fixed health-care budget.
- ::The scope of an evaluation must consider the budget from which vaccines are funded, and the decision-maker's stated aims for that spending to achieve.

* * * *

Media/Policy Watch

This section is intended to alert readers to substantive news, analysis and opinion from the general media on vaccines, immunization, global; public health and related themes. *Media*

Watch is not intended to be exhaustive, but indicative of themes and issues CVEP is actively tracking. This section will grow from an initial base of newspapers, magazines and blog sources, and is segregated from *Journal Watch* above which scans the peer-reviewed journal ecology.

We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where content is published without restriction, but most publications require registration and some subscription level.

The Atlantic

http://www.theatlantic.com/magazine/

Accessed 13 February 2016

The Zika Virus Family Tree: What Are Flaviviruses? - The Atlantic

Chelsey Coombs - Feb 10, 2016

What the disease spreading through the Americas has in common with yellow fever, dengue, and other flaviviruses.

BBC

http://www.bbc.co.uk/

Accessed 13 February 2016

Zika virus: Brazil hopes to develop vaccine in 'one year'

11 Feb 2016

The Economist

http://www.economist.com/ Accessed 13 February 2016

Politics and vaccinations: What experts say, and what people hear

Feb 5th 2015, 15:47 by N.L. | CHICAGO The Economist

Both the media and politicians are complicit in the spread of anti-vaccine scare stories.

Financial Times

http://www.ft.com/home/uk

Accessed 13 February 2016

[No new, unique, relevant content]

Forbes

http://www.forbes.com/

Accessed 13 February 2016

With Zika, Is There Really A Case Against Postponing The 2016 Olympic Games in Rio?

Given the Zika virus outbreak, national and international athletic associations and officials face huge liability if they let teams travel to the 2016 Olympic Games in Rio and health problems ensue. Those worries are now starting to surface.

Lee Igel, Contributor Feb 12, 2016

Zika On Wall Street: Can These Companies Really Cash In On The Virus?

With the Dow down 9% and the Nasdaq having plunged 15% since New Year's, it has been a lousy start to 2016 on Wall Street—but you wouldn't know it from the bang-up performance of Intrexon, Cerus and Inovio Pharmaceuticals. What do these three biotech companies have in common? They're all hoping to cash in on the rise of Zika virus, the mosquito-borne illness that originated in Brazil and has been linked to birth defects. All three companies are working on methods for preventing or treating the virus....
Arlene Weintraub, Contributor Feb 09, 2016

Foreign Affairs

http://www.foreignaffairs.com/
Accessed 13 February 2016
[No new, unique, relevant content]

Foreign Policy

http://foreignpolicy.com/ Accessed 13 February 2016 [No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/
Accessed 13 February 2016
[No new, unique, relevant content]

Mail & Guardian

http://mg.co.za/

Accessed 13 February 2016

Good job so far, but African leaders need to still do a lot more on vaccines

Of the 10 countries with the most unvaccinated children, 5 are African: DR Congo, Ethiopia, Nigeria, South Africa and Uganda 08 Feb 2016 15:10 Avo Aiavi

...In Ethiopia later this month, ministers of health and finance, as well as other national, traditional and religious leaders, will gather to discuss the unbeatable value of immunisation at the first-ever Ministerial Conference on Immunisation in Africa. This moment presents the perfect opportunity to acknowledge the benefits of vaccine programs, celebrate the successes on the continent, look seriously at what needs to be done to make sure all children get the vaccines they need, and then commit to making that happen...

New Yorker

http://www.newyorker.com/ Accessed 13 February 2016 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 13 February 2016

Catholic Leaders Say Zika Doesn't Change Ban on Contraception

February 14, 2016 - By LAURIE GOODSTEIN

More Than 5,000 Pregnant Women in Colombia Have Zika Virus: Government

February 13, 2016 - By REUTERS

W.H.O. Official on Zika Vaccine Plans

The World Health Organization said Friday that large-scale trials for a Zika virus vaccine were at least a year and a half away.

February 12, 2016 - By AGENCE FRANCE-PRESSE

Time

http://time.com

Accessed 13 February 2016

Gates Foundation: Fear Must Not Dictate Zika Policy

5 February 2016

By Chris Elias and Trevor Mundel

Presidents of Global Development and Global Health respectively, Bill & Melinda Gates Foundation

Early reactions to the HIV/AIDS epidemic demonstrate the dangers of letting fear dictate policy. The spread of Zika virus across the Americas reminds us that a health crisis anywhere can rapidly become a health challenge everywhere. The current outbreak demands an urgent, coordinated and collaborative response by the international community to tackle the virus and its spread.

History teaches us that our response must also be rational and humane. The early years of the HIV/AIDS epidemic demonstrated the dangers of letting fear dictate policy. As families understandably struggle with the anxiety and uncertainty from this new threat, we must ensure we are guided by facts and science...

Wall Street Journal

http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 13 February 2016
[No new, unique, relevant content]

Washington Post

http://www.washingtonpost.com/

Accessed 13 February 2016

NIH officials accelerate timeline for human trials of Zika vaccine, saying they will now begin in the summer -

By Ariana Euniung Cha February 12

National Institutes of Health officials said this week that researchers may be closer to developing a Zika vaccine than previously thought and that tests on human subjects could begin in as soon as a few months.

Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, said in an interview that government scientists have been able to leverage previous research done on two similar viruses — West Nile and dengue — to very quickly create a hybrid vaccine that targets Zika. The researchers are now working on fine-tuning the vaccine and in manufacturing enough of it to be able to test it on 20-30 healthy individuals this summer. Fauci said he is optimistic the experimental vaccine would pass those initial tests and would be ready for a larger-scale trial in early 2017.

"You never say guaranteed in medicine," Fauci said, "but I would be really surprised" if it isn't ready...

Think Tanks et al

Brookings

http://www.brookings.edu/ Accessed 13 February 2016 [No new relevant content]

Center for Global Development

http://www.cgdev.org/ Accessed 13 February 2016 [No new relevant content]

Council on Foreign Relations

http://www.cfr.org/ Accessed 13 February 2016 [No new relevant content]

Vaccines and Global Health: The Week in Review is a service of the Center for Vaccines Ethics and Policy (<u>CVEP</u>) which is solely responsible for its content, and is an open access publication, subject to the terms of the Creative Commons Attribution License (<u>http://creativecommons.org/licenses/by-nc/3.0/</u>). Copyright is retained by CVEP.

Support for this service is provided by its governing institutions — <u>Division of Medical Ethics</u>, <u>NYU Medical School, NYU Langone</u> and the <u>Children's Hospital of Philadelphia Vaccine Education Center</u>. Additional support is provided by <u>PATH</u>; the <u>International Vaccine Institute</u> (IVI); the <u>Bill & Melinda Gates Foundation</u>; and industry resource members Crucell/Janssen/J&J, Pfizer, Sanofi Pasteur U.S., Takeda (list in formation), and the Developing Countries Vaccine Manufacturers Network (<u>DCVMN</u>).

Support is also provided by a growing list of individuals who use this membership service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.