Vaccines and Global Health: The Week in Review
22 August 2015
Center for Vaccine Ethics & Policy (CVEP)

This weekly summary 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.*

Editor's Note:
***Vaccines and Global Health: The Week in Review* resumes publication today following annual leave for the editor. This edition covers highlights for the interim period since 2 August 2015.**

Contents *[click on link below to move to associated content]*

::::::
::::::

EBOLA/EVD [to 22 August 2015]
Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

Editor's Note:
On 13 August 2015, the UN Security Council received a briefing on Ebola/EVD *provided by Margaret Chan, briefing the Council via video link from Hong Kong, was joined by David Nabarro, Special Envoy of the Secretary-General on Ebola; Tété António, Permanent Observer of the African Union to the United Nations; Per Thöresson (Sweden), on behalf of Olof Skoog, Chair of the Peacebuilding Commission; and Mosoka Fallah, Director of the Community-Based Initiative.*
The short summary below in complemented by the full text of the meeting overview and summaries of statements and discussion by member states at the meeting. Due to length, the full text is provided at the end of this edition following Media Watch.

Chance Ebola Can Be Defeated by End of 2015, World Health Organization Chief Tells Security Council, Urging Sustained Focus to Prevent Future Outbreaks
13 August 2015
Secyruty Council SC/12006
Ebola could be "soundly defeated" by the end of the year if the intensity of case detection and contact tracing was sustained, the Director-General of the World Health Organization (WHO) told the Security Council today, outlining reforms to improve the organization's performance and crediting unwavering leadership, especially in Liberia, Guinea and Sierra Leone, for a "night-and-day" difference in the situation from less than a year ago.

Ebola Situation Report - 19 August 2015
[Excerpts]
SUMMARY
:: There were 3 confirmed cases of Ebola virus disease (EVD) reported in the week to 16 August, all of which were reported from Guinea. For the first time since the beginning of the outbreak in Sierra Leone, a full epidemiological week has passed with no confirmed cases reported from the country. Overall case incidence has held at 3 confirmed cases per week for 3 consecutive weeks. In addition, the number of contacts under observation has halved from over 1600 on 9 August to approximately 800 throughout 3 Guinean prefectures and 3 districts in Sierra Leone on 16 August. Almost 600 contacts in Tonkolili, Sierra Leone, completed the 21-day follow-up period on 14 August, accounting for most of the decline in the number of contacts under follow-up. However, there is still a significant risk of further transmission. In addition to the large number of contacts who remain under observation in Guinea and Sierra Leone, 45 contacts have been lost to follow-up in the Guinean capital Conakry over the past 6 weeks. Several high-risk contacts have also been lost to follow-up in the Sierra Leonean capital, Freetown. Rapid-response teams remain alert and ready to respond to further cases.

COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION
:: There have been a total of 27,952 reported confirmed, probable, and suspected cases of EVD in Guinea, Liberia, and Sierra Leone (figure 1, table 1) up to 16 August, with 11,284 reported deaths (this total includes reported deaths among probable and suspected cases, although

outcomes for many cases are unknown). Three new confirmed cases were reported in Guinea in the week to 16 August…

::::::

WHO: Challenges of getting children to health centres after Ebola

21 August 2015 -- Intense surveillance in Kambia, Sierra Leone, has revealed around 75% of deaths have been occurring in children under 5. Even though Ebola transmission was halted in Kambia last month, mothers still are afraid of Ebola and don't take their young children to health centres. WHO epidemiologists are countering misperceptions to get mothers and their children back to the health centres and lower childhood mortality rates.
Read the story from Sierra Leone

WHO: Stories from the field
Exploring fear to regain trust: Getting children to health care in Sierra Leone
21 August 2015
Ebola survivors clinic opens in Monrovia
12 August 2015
Sierra Leone: Tracing Ebola in Tonkolili
4 August 2015

::::::
::::::

POLIO [to 22 August 2015]
Public Health Emergency of International Concern (PHEIC)

Statement on the 6th IHR Emergency Committee meeting regarding the international spread of wild poliovirus
WHO statement
17 August 2015
[Editor's excerpts and text bolding]
The sixth meeting of the Emergency Committee under the International Health Regulations (2005) (IHR) regarding the international spread of wild poliovirus was convened via teleconference by the Director-General on 4 August 2015. The following IHR States Parties submitted an update on the implementation of the Temporary Recommendations since the Committee last met on 24 April 2015: Afghanistan and Pakistan.

The Committee noted that since the declaration that the international spread of polio constituted a Public Health Emergency of International Concern (PHEIC), strong progress has been made by countries toward interruption of wild poliovirus transmission, implementation of Temporary Recommeations issued by the Director-General, and overall decline in occurrence of international spread of wild poliovirus. The Committee appreciated these commendable achievements….

…While the primary measure to prevent international spread remains interruption of wild poliovirus transmission in infected countries, reducing vulnerability and risk of outbreak in vulnerable regions is critically important. Countries or areas affected by conflict are vulnerable

to outbreaks of polio because insecurity and inaccessibility can lead to deterioration of public health and immunization. Those vulnerable include the conflict-affected countries in the Middle East, the Horn of Africa and central Africa, particularly the Lake Chad Region. The hard-earned gains can be quickly lost if there is continued disruption of health systems in settings of complex humanitarian emergencies.

The world has reached the critical end stage for global polio eradication and loss of momentum now could reverse or prevent the world achieving this global goal. The Committee unanimously agreed that the international spread of polio remains a PHEIC and recommended the extension of the Temporary Recommendations, as revised, for a further three months.

The Committee considered the following factors in reaching this conclusion:
:: The continued international spread of wild poliovirus in 2015, including during the recent low transmission season in Pakistan and Afghanistan, while recognizing the progress achieved and the decrease in the number of cases.
:: The risk and consequent costs of failure to eradicate globally one of the world's most serious vaccine preventable diseases.
:: The continued necessity of a coordinated international response to improve immunization and surveillance for wild poliovirus, stop its international spread and reduce the risk of new spread with the onset of the high transmission season in May/June 2015.
:: The serious consequences of further international spread for the increasing number of countries in which immunization systems have been weakened or disrupted by conflict and complex emergencies. Populations in these fragile states are vulnerable to outbreaks of polio. Outbreaks in fragile states are exceedingly difficult to control and threaten the completion of global polio eradication during its end stage.
:: The importance of a regional approach and strong cross-border cooperation, as much international spread of polio occurs over land borders, while recognizing that the risk of distant international spread remains from zones with active poliovirus transmission.

The Committee provided the Director-General with…advice aimed at reducing the risk of international spread of wild poliovirus, based on the risk stratification as follows:
:: States currently exporting wild poliovirus.
:: States infected with wild poliovirus but not currently exporting.
:: States no longer infected by wild poliovirus, but which remain vulnerable to international spread.
[Full specific recommendations and full text of announcement here]

Note on vaccine-derived poliovirus
While not the specific subject of the PHEIC, the committee also noted that stopping the outbreaks of circulating vaccine derived poliovirus is a critical component of the Polio Endgame Strategy. The Committee recommended that more attention should be paid to the on-going type 1 circulating vaccine derived poliovirus in Madagascar and cautioned that polio eradication could not be completed until all poliovirus transmission is interrupted. The Committee also urged international partners to offer additional support to Madagascar to address the challenge of on-going circulating vaccine derived poliovirus.

Based on the advice concerning wild poliovirus, the reports made by Afghanistan and Pakistan and the currently available information, the Director-General accepted the Committee's assessment and on 10 August 2015 determined that the events relating to wild poliovirus continue to constitute a PHEIC. The Director-General endorsed the Committee's recommendations for 'States currently exporting wild polioviruses', for 'States infected with wild poliovirus but not currently exporting' and for 'States no longer infected by wild poliovirus, but which remain vulnerable to international spread' and extended them, as revised by the Committee, as Temporary Recommendations under the IHR to reduce the international spread of wild poliovirus, effective 10 August 2015. The Director-General thanked the Committee Members and Advisors for their advice and requested their reassessment of this situation within the next three months.

With regard to the concerns about on-going circulating vaccine-derived poliovirus, the Director-General emphasized the critical importance of interrupting all poliovirus transmission, including outbreaks of vaccine-derived poliovirus for successful completion of polio eradication.

::::::

GPEI Update: Polio this week - *As of 19 August 2015*
Global Polio Eradication Initiative
[Editor's Excerpt and text bolding]
Full report: http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx
:: This week, Pakistan will become the second polio-endemic country to introduce the inactivated polio vaccine (IPV) into its routine immunization system. More than half the global birth cohort is now receiving at least one dose of IPV through routine immunization systems as a result of the biggest globally synchronized vaccine introduction in history. Read more on the status of IPV introductions here.
:: The emergency committee of the International Health Regulations (IHR) has met for the sixth time and assessed that the international spread of polio continues to constitute a Public Health Emergency of International Concern (PHEIC). Their full report can be accessed here.
:: National vaccination campaigns to protect children against polio and measles are taking place in Yemen targeting more than 5 million children under the age of five. More

Selected excerpts from Country-specific Reports
Nigeria
:: In line with the National Emergency Action Plan for polio eradication, aggressive and rapid vaccination activities are conducted in response to any detected virus. Three case response 'mopping-up campaigns' using trivalent oral polio vaccine (tOPV) have taken place in the FCT and Kaduna and Kogi states, as well as in adjacent LGAs of Niger and Nasarawa states, to stop transmission of the persistent strain of cVDPV2. Subnational Immunization Days (SNIDs) are planned in the north of Nigeria on 5 September and 17 October using trivalent OPV.
Pakistan
:: Two new environmental samples positive for WPV1 were reported this week, the first in Quetta district of Balochistan and the second in Multan district of Punjab, both collected on 28 July. In addition, one new environmental sample positive for VDPV2 was reported in Gulshan-e-Iqbal district of Sindh, collected on 7 July.
:: Environmental surveillance indicates continuing circulation of polioviruses, not just in known infected areas but also in areas without confirmed cases. Environmental surveillance continues

to be a very helpful supplemental surveillance tool enabling the programme to increase the overall sensitivity of surveillance for polioviruses.

Forty thousand health workers fan across Yemen
Ensuring children are protected from polio and measles
August 14, 2015
Yemen launches on Saturday 15 August a national round of vaccination campaign against measles and polio, to protect children from these preventable diseases and ensure that Yemen remains polio-free. Despite the ongoing conflict in Yemen, the campaign is aiming to cover the entire country – more than 5 million under five years of age with polio vaccine and 1.4 million children under the age of 15. More than 40,000 health workers and volunteers are being mobilized for this effort, supported by the government and the Global Polio Eradication Initiative.

The conflict in Yemen has posed challenges to the polio eradication programme, including difficulties in distributing vaccines to health facilities, the closure of over 20% of health centres, and the inability of people to reach the centres that remain due to conflict. In spite of the political unrest in Yemen, 88% of children were reached with routine vaccines through health facilities and campaigns in 2014. A national measles, rubella and polio campaign was implemented in November 2014 reaching as many as 93% of children.

The campaign is made possible by contributors to the Horn of Africa polio outbreak, which has included operations in Yemen. The Global Polio Eradication Initiative receives financial support from governments of countries affected by polio; private sector foundations, donor governments, multilateral organizations, private individuals, humanitarian and nongovernmental organizations and corporate partners. Full list of all contributors.

::::::
::::::

MERS-CoV [to 22 August 2015]
Global Alert and Response (GAR) – Disease Outbreak News (DONs)
:: Middle East Respiratory Syndrome coronavirus (MERS-CoV) – Saudi Arabia
18 August 2015
Between 13 and 17 August 2015, the National IHR Focal Point for the Kingdom of Saudi Arabia notified WHO of 19 additional cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection, including 1 death. Fifteen (15) of these reported cases are associated with a MERS-CoV outbreak currently occurring in a hospital in Riyadh…

[back to top/Contents]

::::::
::::::

WHO & Regionals [to 22 August 2015]

WHO: Health workers are heroes in humanitarian action

19 August 2015 -- The heroes are the doctors, nurses, paramedics and other health workers who selflessly serve their communities, often with little access to resources and sometimes at great risk to their own lives. World Humanitarian Day, 19 August, is a time to recognize those who face danger and adversity in order to help others. WHO is launching a campaign focusing on health workers. Join us as we send messages of thanks to health heroes around the world. Find out more about World Humanitarian Day

WHO: Vaccine hesitancy: A growing challenge for immunization programmes

News release

18 August 2015 | Geneva - People who delay or refuse vaccines for themselves or their children are presenting a growing challenge for countries seeking to close the immunization gap. Globally, 1 in 5 children still do not receive routine life-saving immunizations, and an estimated 1.5 million children still die each year of diseases that could be prevented by vaccines that already exist, according to WHO.

In a special issue of the journal *Vaccine*, guest-edited by WHO and published today, experts review the role of vaccine hesitancy in limiting vaccine coverage and explore strategies to address it. Vaccine hesitancy refers to delay in acceptance or refusal of safe vaccines despite availability of vaccination services.

The issue is complex and context specific, varying across time, place and vaccines. It is influenced by factors such as misinformation, complacency, convenience and confidence. "Vaccines can only improve health and prevent deaths if they are used, and immunization programmes must be able to achieve and sustain high vaccine uptake rates. Vaccine hesitancy is an increasingly important issue for country immunization programmes," says Dr Philippe Duclos, Senior Health Adviser for WHO's Immunization, Vaccines and Biological Department and guest editor of the special issue, entitled WHO recommendations regarding vaccine hesitancy. The authors of the editorial of the journal note, "As the recent Ebola crisis tragically brought to light, engaging with communities and persuading individuals to change their habits and behaviours is a lynchpin of public health success. Addressing vaccine hesitancy is no different." The recommendations proposed by WHO aim to increase the understanding of vaccine hesitancy, its determinants and challenges. They also suggest ways organizations can increase acceptance of vaccines, share effective practices, and develop new tools to assess and address hesitancy.

Factors contributing to vaccine hesitancy

Concerns about vaccine safety can be linked to vaccine hesitancy, but safety concerns are only one of many factors that may drive hesitancy. Vaccine hesitancy can be caused by other factors such as: negative beliefs based on myths, e.g. that vaccination of women leads to infertility; misinformation; mistrust in the health care professional or health care system; the role of influential leaders; costs; geographic barriers and concerns about vaccine safety.

But the authors note there is no "magic bullet," or single intervention strategy that works for all instances of vaccine hesitancy. The magnitude and setting of the problem varies and must be diagnosed for each instance to develop tailored strategies to improve vaccine acceptance.

Effective communication is key to dispelling fears, addressing concerns and promoting acceptance of vaccination.

Vaccine hesitancy is not only an issue in high income countries, but is a complex, rapidly changing global problem that varies widely. Interviews with immunization managers from WHO regions revealed that while in some cases particular rural ethnic minorities and remote communities were affected; in other areas wealthy urban residents expressed concerns regarding vaccine safety. In some areas concerns are related to subgroups of religious or philosophical objectors.

Determinants of vaccine hesitancy can act both as barriers and promoters: For example, a higher level of education does not necessarily predict vaccine acceptance, the experts note. In fact, a number of studies identify higher education as a potential barrier to vaccine acceptance in some settings, while other studies identify education as a promoter of vaccine acceptance in different areas. Even fear of needles can be a factor for vaccine refusal and WHO will issue, in September 2015, a position paper on pain mitigation.

The **Weekly Epidemiological Record (WER) 21 August 2015**, vol. 90, 34 (pp. 421–432) includes:
:: Addendum to report of the Global Advisory Committee on Vaccine Safety (GACVS), 10–11 June 2015
:: Progress towards poliomyelitis eradication in Nigeria, January 2014–July 2015
:: Monthly report on dracunculiasis cases, January-June 2015

The **Weekly Epidemiological Record (WER) 14 August 2015, vol. 90, 33 (pp. 409–420)** includes:
:: Outbreak news - Chikungunya: case definitions for acute, atypical and chronic cases

The **Weekly Epidemiological Record (WER) 7 August 2015, vol. 90, 32 (pp. 393–408)** includes:
:: Laboratory response to the West African Ebola outbreak 2014–2015
:: Plans for containment of poliovirus following type specific polio eradication worldwide, 2015

Call for Nominations: Recognized immunization experts solicited for Immunization Practices Advisory Committee (IPAC) 11 August 2015
Overview, Criteria, Application process
pdf, 123kb

Call for proposals: Evaluation of vaccine manufacturers' perceptions regarding Controlled Temperature Chain (CTC) 6 August 2015
Terms of reference
pdf, 297kb
Deadline for application: 11 September 2015

GIN July 2015 pdf, 1.37Mb

:: **WHO Regional Offices**

WHO African Region AFRO

:: Courtesy call of German Ambassador to WHO Regional Office for Africa

Brazzaville, 18 August 2015 – The German Ambassador to the Republic of Congo, His Excellency Thomas Strieder paid a courtesy call on the World Health Organization Regional Office in Djoue, Brazzaville where he was received by Dr Matshidiso Moeti, the WHO Regional Director for Africa. During the visit, they discussed a range of issues including polio eradication and ongoing efforts to ensure that investments made to eradicate polio contribute to future health goals. They also discussed how Federal Republic of Germany and WHO can work together to support the Republic of Congo in its health development efforts.

:: Asbestos use continues in Africa despite severe health warnings - *17 August 2015*

:: Africa advances toward a polio-free continent - *12 August 2015*

WHO Region of the Americas PAHO

No new digest content identified.

WHO South-East Asia Region SEARO

No new digest content identified.

WHO European Region EURO

:: On World Humanitarian Day: Interview with a Syrian doctor 19-08-2015

:: First case of chikungunya diagnosed in Spain 13-08-2015

:: WHO European Region has lowest global breastfeeding rates 05-08-2015

WHO Eastern Mediterranean Region EMRO

:: Regional Director's statement on the occasion of World Humanitarian Day 2015

19 August, 2015, Cairo, Egypt -- Every year, World Humanitarian Day provides us with the opportunity to recognize and honour the people who help other people – the humanitarian aid workers who dedicate their lives to serving those in need. It is thanks to these health workers and hundreds of others throughout the Region, who are willing to put the well-being of others above all else, that WHO is able to fulfil its mission to save lives.

Read the full statement

:: WHO continues support to immunization activities in Yemen

14 August 2015

WHO Western Pacific Region

:: More than 200 000 children in Papua New Guinea to benefit from polio, measles-rubella vaccine

PORT MORESBY, 12 August 2015 – More than 200 000 children stand to benefit from life-saving polio and measles-rubella vaccines as Papua New Guinea introduced the injectable inactivated polio vaccine (IPV) and measles-rubella (MR) vaccine into the country's routine immunization programme.

Read the news release

::::::

CDC/MMWR/ACIP Watch [to 22 August 2015]

http://www.cdc.gov/media/index.html
MMWR August 21, 2015 / Vol. 64 / No. 32
:: Progress Toward Poliomyelitis Eradication — Nigeria, January 2014–July 2015

[back to top/Contents]

::::::
::::::

Initiatives/Announcements/Milestones

IAVI International AIDS Vaccine Initiative [to 22 August 2015]
http://www.iavi.org/press-releases/2015
:: **IAVI Names Dr. Mark Feinberg New President and CEO**
August 12, 2015

NEW YORK – The Board of Directors of the International AIDS Vaccine Initiative (IAVI) announced today that Mark Feinberg, MD, PhD, has been appointed IAVI's new President and CEO, effective 8 September 2015.

"Mark brings a wealth of relevant experience and the passion to lead IAVI through the next chapter of our journey towards an AIDS vaccine," said Alex Coutinho, IAVI Board Chair. "He shares IAVI's strong commitment to program excellence, collaboration and partnership, responsible donor stewardship, and transparency."

Feinberg has been actively involved in basic, translational and clinical HIV research efforts for more than 30 years. He brings broad and integrative perspectives from his leadership experiences in academia, government and industry; his familiarity with successful approaches for product development and delivery, and his track record for collaboration and innovation in forging new multi-sector partnership models. He has extensive experience advancing scientific and public health policy initiatives that focus on the prevention and treatment of HIV infection and other infectious diseases in resource-limited settings and that champion equitable and accelerated global access to innovative drugs and vaccines.

"I have directly witnessed the devastating impact that AIDS has had on individuals, families, communities and countries around the world, especially for the most vulnerable populations," said Feinberg. "I am honored to have the opportunity to work with the IAVI team and their tremendous partners to fulfill IAVI's promise to be the most effective partner, catalyst and facilitator in supporting collective efforts to accelerate the development of an effective HIV vaccine. This goal remains a critically important one, and achieving it will require all of us to apply the best science and creativity along with a high level of openness to forging new models of collaboration."

For the past 11 years, Feinberg has served in leadership roles for the vaccine and infectious disease portfolios at Merck & Co., Inc., most recently as Chief Public Health and Science Officer for Merck Vaccines…

Sabin Vaccine Institute [to 22 August 2015]
http://www.sabin.org/updates/pressreleases
:: **New Global Initiative to Advance Onchocerciasis Vaccine Development for Africa**

WASHINGTON, D.C. – August 11, 2015 – The Sabin Vaccine Institute Product Development Partnership (Sabin PDP) has joined The Onchocerciasis Vaccine for Africa (TOVA) Initiative,

which was established this year to develop and test a vaccine for onchocerciasis. Also known as river blindness, onchocerciasis infects an estimated 17 million people, with more than 99 percent of these cases spread throughout 31 countries in sub-Saharan Africa. Approximately 169 million people are at risk of contracting this disease.

NIH [to 22 August 2015]
http://www.nih.gov/news/releases.htm
:: **Large percentage of youth with HIV may lack immunity to measles, mumps, rubella**
NIH study finds those vaccinated before starting modern HIV therapy may be at risk.
August 13, 2015 —Between one-third and one-half of individuals in the United States who were infected with HIV around the time of birth may not have sufficient immunity to ward off measles, mumps, and rubella—even though they may have been vaccinated against these diseases. This estimate, from a National Institutes of Health research network, in collaboration with the Centers for Disease Control and Prevention, is based on a study of more than 600 children and youth exposed to HIV in the womb.
"Having a high level of immunity to measles, mumps, and rubella is important not only for an individual's health, but also for preventing disease outbreaks in the larger community," said the study's first author, George K. Siberry, M.D., Medical Officer in the Maternal and Pediatric Infectious Disease Branch of NIH's Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). "Individuals infected with HIV at birth who did not have the benefit of combined antiretroviral therapy before they were vaccinated should speak with their physician about whether they need a repeated course of the vaccine." The study was published online in Clinical Infectious Diseases…

IVI [to 22 August 2015]
http://www.ivi.org/web/www/home
:: **Yanghyun Foundation Donates KRW 37 Million to IVI to Support Vaccination Campaign in Earthquake-hit Nepal**
..IVI and the Yanghyun Foundation held a donation delivery ceremony at the Eusu Holdings Building on August 4
..The funds will be used to support a cholera vaccination campaign in Nepal, where two devastating earthquakes hit earlier this year and left many at risk for cholera
..The foundation has contributed a cumulative total of about KRW 243 million to IVI over the past 8 years
4 August 2015 SEOUL, REPUBLIC OF KOREA – The International Vaccine Institute (IVI), an international organization based in Seoul, announced today that the Yanghyun Foundation donated KRW 37 million to IVI to support the institute's vaccination campaign in earthquake-hit Nepal, during a fund delivery ceremony held at the Eusu Holdings Building in Yeouido. The philanthropic foundation has supported IVI over the past eight years, contributing a cumulative total of approximately KRW 243 million…

UNICEF [to 22 August 2015]
http://www.unicef.org/media/media_78364.html
Selected press release and news notes

Hygiene practices have helped keep Ebola out of the classroom
CONAKRY/FREETOWN/MONROVIA, 12 August 2015 – As students in Guinea, Liberia and Sierra Leone begin their summer vacations, measures put in place to protect them from the Ebola virus are being credited with having helped keep classrooms free from any infections.

Gavi [to 22 August 2015]
http://www.gavialliance.org/library/news/press-releases/
:: **More than four million children per year in Pakistan to benefit from new injectable polio vaccine**
20 August 2015
Polio-endemic country takes another step towards a polio-free future as it introduces IPV into its routine immunisation programme, as part of largest globally coordinated vaccine introduction in history (joint press release Pakistan MoH, UNICEF, GPEI, WHO, Gavi).
:: **People in Cameroon to be protected against cholera with Gavi-supported vaccine**
18 August 2015
More than 110,000 doses of oral cholera vaccine will protect people in the northern region.
:: **More than 200,000 Papua New Guinea children to be protected with the new polio and measles-rubella vaccines**
12 August 2015
In a landmark step to help accelerate the global eradication of polio and protect its children against measles and rubella, Papua New Guinea introduces the inactivated polio vaccine (IPV) into its routine immunisation programme and launches a nationwide measles-rubella vaccine (MR) campaign.

Global Fund [to 22 August 2015]
http://www.theglobalfund.org/en/mediacenter/newsreleases/
:: **Ghana Takes Big Step in Health with New Global Fund Grants**
18 August 2015
ACCRA, Ghana – In a ceremony hosted by the president of Ghana, the Government of Ghana and the Global Fund today strengthened their partnership by signing new grants for US$ 248 million to substantially increase the number of people receiving prevention, treatment and care for HIV, tuberculosis and malaria.
The financial resources provided through the Global Fund come from many sources and partners, represented today at a signing event held at the presidential palace by the U.S. President's Emergency Plan for Aids Relief, the UK Department for International Development, France, Germany, Japan, the European Union, Canada, the Netherlands, Denmark, Korea, UNICEF, UNAIDS and WHO, among others.
The seven new grants will build resilient and sustainable systems for health, fund HIV treatment for an additional 56,736 people, increase malaria treatment coverage for children under five and significantly expand diagnosis and treatment for TB.
:: **Life-saving HIV treatment for adults and children arrives in Ukraine**
17 August 2015
:: **Standard Bank partners with the Global Fund on CSI initiatives in Africa**
17 August 2015

JOHANNESBURG, South Africa - An expanded partnership between Standard Bank and the Global Fund aims to provide better financial tools and skills to organizations implementing programs to fight AIDS, tuberculosis and malaria in Africa.

This is an extension of the pro-bono agreement signed in 2008 between the two organizations. The partnership, which was signed on 15 April 2015, extends the relationship between the two organizations for an additional three years.

The Global Fund mobilizes and invests US$4 billion a year to combat the AIDS, tuberculosis and malaria epidemics. It supports programs run by local experts in countries and communities most in need. More than 50 percent of that funding is directed to countries in Africa.

The partnership between Standard Bank and the Global Fund focuses on improving the financial skills and management expertise of Global Fund implementers. These include government health ministries, faith-based organizations, non-government organizations and private sector foundations…

European Medicines Agency [to 22 August 2015]
http://www.ema.europa.eu/ema/
:: **Updated guidance on good clinical practice released for consultation**
Comments on the ICH E6 addendum are invited until 3 February 2016

21/08/2015 The European Medicines Agency (EMA) has released an addendum to the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) E6 (R2) guideline on good clinical practice (GCP) for a six-month public consultation.

Stakeholders are invited to send their comments using the template provided by 3 February 2016. The completed template should be sent to ich@ema.europa.eu.

GCP is an international ethical and scientific quality standard for designing, recording and reporting trials that involve the participation of human subjects. Compliance with this standard provides public assurance that the rights, safety and wellbeing of trial subjects are protected and that clinical-trial data are credible.

The current ICH E6 guideline provides a unified standard on GCP. It describes responsibilities and activities of sponsors, monitors, investigators and ethics committees.

Since the finalisation of this guideline in 1996, the scale, complexity and costs of clinical trials have increased. Developments in technology and risk management processes offer new opportunities to increase their efficiency by allowing sponsors to focus on relevant activities. With this in mind, the guideline has been amended to:
..encourage implementation of improved and more efficient approaches to clinical trial design, conduct, oversight, recording and reporting while continuing to ensure the protection of clinical trial participants, and data integrity;
..update standards regarding electronic records and essential documents intended to increase the quality and efficacy of clinical trials.

Updates have been made to several sections of the guideline and are highlighted in the document.
Guideline for good clinical practice E6(R2) 4 - Step 2b (04/08/2015)

Industry Watch [to 22 August 2015]
:: **Pfizer Inc. (NYSE:PFE) announced today positive topline results of two Phase 3 studies of TRUMENBA® (Meningococcal Group B Vaccine).**

August 21, 2015

…One study included approximately 3,600 healthy individuals 10 through 18 years of age, and the other study included approximately 3,300 healthy individuals 18 through 25 years of age. Both studies met all primary immunogenicity endpoints, demonstrating robust immune responses against certain invasive meningococcal B strains after the vaccine dose series. Safety and tolerability data from both studies were also consistent with data from previous studies.

"We are very pleased with these Phase 3 data that show immunogenicity and safety data consistent with findings that formed the basis for the accelerated FDA approval of TRUMENBA," said Kathrin Jansen, Ph.D., senior vice president of Vaccine Research and Development for Pfizer Inc. "The Phase 3 data extend the body of evidence that supports vaccination of adolescents and young adults with TRUMENBA to help prevent serogroup B meningococcal disease."…

::::::
::::::

BMGF - Gates Foundation [to 22 August 2015]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified

PATH [to 22 August 2015]
http://www.path.org/news/index.php
No new diges content identified

Aeras [to 22 August 2015]
http://www.aeras.org/pressreleases
No new digest content identified

European Vaccine Initiative [to 22 August 2015]
http://www.euvaccine.eu/news-events
No new digest content identified

FDA [to 22 August 2015]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
No new digest content identified

[back to top/Contents]

* * * *

Reports/Research/Analysis/Commentary/Conferences/Meetings/Book Watch/Tenders

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

State of the World's Indigenous Peoples – 2nd Volume: Indigenous People's Access To Health

UN DESA
August 2015 :: 198 pages
Advance Copy pdf: www.undesadspd.org/Portals/0/SOWIP_final.pdf

[Excerpt from Foreward]
…The United Nations Declaration on the Rights of Indigenous Peoples states that indigenous peoples have the right to be actively involved in developing and determining their health programmes; the right to their traditional medicines, maintain their health practices, and the equal right to the enjoyment of the highest attainable standard of physical and mental health. Unfortunately, indigenous peoples suffer higher rates of ill health and have dramatically shorter life expectancy than other groups living in the same countries. This inequity results in indigenous peoples suffering unacceptable health problems and they are more likely to experience disabilities and dying at a younger age than their non-indigenous counterparts.

Indigenous peoples' health status is severely affected by their living conditions, income levels, employment rates, access to safe water, sanitation, health services and food availability. Indigenous peoples are facing destruction to their lands, territories and resources, which are essential to their very survival. Other threats include climate change and environmental contamination (heavy metals, industrial gases and effluent wastes).

Indigenous peoples also experience major structural barriers in accessing health care. These include geographical isolation and poverty which results in not having the means to pay the high cost for transport or treatment. This is further compounded by discrimination, racism and a lack of cultural understanding and sensitivity. Many health systems do not reflect the social and cultural practices and beliefs of indigenous peoples…

[Excerpt from Introduction]
…The State of the World's Indigenous Peoples will remain a recurrent "flagship" publication produced by the United Nations. It is intended that such publications, such as this, will deal with a broad spectrum of indigenous peoples' issues. It is hoped that such a publication, given its function of supporting the United Nations Permanent Forum will also promote awareness of indigenous peoples' issues within the United Nations system, with States, academia and the broader public.

The current situation of indigenous peoples remains a concern within the United Nations. It has been estimated that the world's 370 million indigenous peoples reside in approximately 90 countries of the world.3 They are among the world's most marginalized peoples, and are often isolated politically and socially within the countries where they reside by the geographical location of their communities, their separate histories, cultures, languages and traditions. They are often among the poorest peoples and the poverty gap between indigenous and non-indigenous groups is increasing in many countries around the world. This influences indigenous peoples' quality of life and their right to health.

Indigenous peoples' access to adequate health care remains one of the most challenging and complex areas that require an urgent focus on the main health issues as well as examining

alternative health care frameworks. As previously stated, health is one of the six mandated areas of the United Nations Permanent Forum on Indigenous Issues and is one of the focuses of the World Health Organization which recognizes the right to health as a fundamental human right in its constitution. The United Nations Declaration on the Rights of Indigenous Peoples includes articles (21, 23, 24, and 29) that refer specifically to the right to health including indigenous peoples' right to improving their economic and social conditions in the area of health and that particular attention to the needs of indigenous elders, women, youth, children and persons with disabilities. Further, indigenous peoples have the right to determine their health programmes and to administer these programmes through their own institutions as well as maintaining their traditional health practices. Also, that States take effective measures to ensure that programmes for monitoring, maintaining and restoring the health of indigenous peoples, as developed and implemented by the peoples affected by such materials, are duly implemented.

Indigenous peoples face a myriad of obstacles when accessing public health systems such as the lack of health facilities in indigenous communities, cultural differences with the health care providers such as differences in languages, illiteracy and lack of understanding of indigenous culture and traditional health care systems. There is also an absence of adequate health insurance or lack of economic capacity to pay for services. As a result, indigenous peoples often cannot afford health services even if it is available. Marginalization also means that indigenous peoples are reluctant or have difficulties in participating in non-indigenous processes or systems at the community, municipal, state and national levels…

National Vaccine Advisory Committee Meeting [U.S.]
September 9-10, 2015
Registration

During the September NVAC meeting, the Committee will hear updates on a number of Departmental and stakeholders activities that are working to strengthen our national immunization system. These discussions will include:

:: Updates on progress towards the Healthy People 2020 immunization goals, followed by presentations specifically examining progress towards the Healthy People 2020 goals to achieve 90% influenza vaccination coverage among healthcare personnel in a long-term care settings.

:: An overview of efforts to support global immunizations including an introduction to a number of global immunization strategies from CDC, USAID and PAHO.

:: Information on how data on state exemption laws is collected and used to inform studies on vaccination coverage and vaccine acceptance in specific populations.

:: Continued discussions on vaccine confidence studies looking at how attitudes and beliefs about immunizations changes over time.

:: Information on local and federal efforts to help increase vaccine confidence in communities.

Additional information on meeting topics and times can be found in the meeting agenda.
Registration

DCVMN [Developing Country Vaccine Manufacturers Network] 16th International Annual General Meeting – Quality Vaccines for All
5 October 2015 to 7 October 2015
Bangkok / Thailand

[back to top/Contents]

* * * *

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

The American Journal of Bioethics
Volume 15, Issue 8, 2015
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

American Journal of Infection Control
August 2015 Volume 43, Issue 8, p785-904, e39-e46
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
September 2015 Volume 49, Issue 3 , Supplement 2, S125-S218
http://www.ajpmonline.org/current
Theme: Evidence-Based Behavioral Counseling Interventions as Clinical Preventive Services: Perspectives of Researchers, Funders, and Guideline Developers
Edited by Robert J. McNellis, Susan J. Curry
[New issue; No relevant content identified]

American Journal of Public Health
Volume 105, Issue 9 (September 2015)
http://ajph.aphapublications.org/toc/ajph/current
The Impact of Vaccine Concerns on Racial/Ethnic Disparities in Influenza Vaccine Uptake Among Health Care Workers
Rohit P. Ojha, Sericea Stallings-Smith, Patricia M. Flynn, Elisabeth E. Adderson, Tabatha N. Offutt-Powell, Aditya H. Gaur
American Journal of Public Health: September 2015, Vol. 105, No. 9: e35–e41.
Abstract

Objectives. We explored whether collective concerns about the safety, effectiveness, and necessity of influenza vaccines mediate racial/ethnic disparities in vaccine uptake among health care workers (HCWs).
Methods. We used a self-administered Web-based survey to assess race/ethnicity (exposure), concerns about influenza vaccination (mediator; categorized through latent class analysis), and influenza vaccine uptake (outcome) for the 2012 to 2013 influenza season among HCWs at St. Jude Children's Research Hospital in Memphis, Tennessee. We used mediation analysis to estimate prevalence ratios (PRs) and 95% confidence intervals (CIs) for the total, direct, and indirect effects of race/ethnicity on influenza vaccine uptake.
Results. Non-Hispanic Blacks had lower influenza vaccine uptake than non-Hispanic Whites (total effect: PR = 0.87; 95% CI = 0.75, 0.99), largely mediated by high concern about influenza vaccines (natural indirect effect: PR = 0.89; 95% CI = 0.84, 0.94; controlled direct effect: PR = 0.98; 95% CI = 0.85, 1.1). Hispanic and Asian HCWs had modestly lower uptake than non-Hispanic Whites, also mediated by high concern about influenza vaccines.
Conclusions. Racial/ethnic disparities among HCWs could be attenuated if concerns about the safety, effectiveness, and necessity of influenza vaccines were reduced.

Understanding Trends in Pertussis Incidence: An Agent-Based Model Approach
Erinn Sanstead, Cynthia Kenyon, Seth Rowley, Eva Enns, Claudia Miller, Kristen Ehresmann, Shalini Kulasingam
American Journal of Public Health: September 2015, Vol. 105, No. 9: e42–e47.

Unintended Consequences of Screening for Ebola
Laura Johnson Faherty, Chyke A. Doubeni
American Journal of Public Health: September 2015, Vol. 105, No. 9: 1738–1739.

Public Health Intelligence: Learning From the Ebola Crisis
Timothy Jay Carney, David Jay Weber
American Journal of Public Health: September 2015, Vol. 105, No. 9: 1740–1744.

American Journal of Tropical Medicine and Hygiene
August 2015; 93 (2)
http://www.ajtmh.org/content/current
Editorial
Striding Toward Malaria Elimination in China
Michelle S. Hsiang and Roly D. Gosling
Am J Trop Med Hyg 2015 93:203-204; Published online June 15, 2015, doi:10.4269/ajtmh.15-0391
OPEN ACCESS ARTICLE

Perspective Piece
When Potentially Lifesaving Drugs are Both Experimental and in Very Short Supply: A Clinician's Story from the Front Lines of the Battle Against Ebola
Linda M. Mobula
Am J Trop Med Hyg 2015 93:210-211; Published online June 1, 2015, doi:10.4269/ajtmh.15-0302

Annals of Internal Medicine
18 August 2015, Vol. 163. No. 4
http://annals.org/issue.aspx
Ideas and Opinions
Orchestrated Scientific Collaboration: Critical to the Control of MERS-CoV FREE
Trish M. Perl, MD, MSc; and Connie Savor Price, MD

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 22 August 2015)
Research article
Why do women choose private over public facilities for family planning services? A qualitative study of post-partum women in an informal urban settlement in Kenya
Sirina Keesara, Pamela Juma, Cynthia Harper
BMC Health Services Research 2015, 15:335 (20 August 2015)
Abstract

Research article
Can she make it? Transportation barriers to accessing maternal and child health care services in rural Ghana
Kilian Atuoye, Jenna Dixon, Andrea Rishworth, Sylvester Galaa, Sheila Boamah, Isaac Luginaah
BMC Health Services Research 2015, 15:333 (20 August 2015)
Abstract

Research article
The elimination of healthcare user fees for children under five substantially alleviates the burden on household expenses in Burkina Faso
Mahaman Abdou Illou, Slim Haddad, Isabelle Agier, Valéry Ridde
BMC Health Services Research 2015, 15:313 (8 August 2015)
Abstract

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 22 August 2015)
Research article
Global travel patterns and risk of measles in Ontario and Quebec, Canada: 2007–2011
Sarah Wilson, Kamran Khan, Vladimir Gilca, Jennifer Miniota, Shelley Deeks, Gillian Lim, Rose Eckhardt, Shelly Bolotin, Natasha Crowcroft
BMC Infectious Diseases 2015, 15:341 (18 August 2015)
Abstract

Research article
Sustained low influenza vaccination in health care workers after H1N1 pandemic: a cross sectional study in an Italian health care setting for at-risk patients

Antonietta Giannattasio, Miriam Mariano, Roberto Romano, Fabrizia Chiatto, Ilaria Liguoro, Guglielmo Borgia, Alfredo Guarino, Andrea Lo Vecchio
BMC Infectious Diseases 2015, 15:329 (12 August 2015)
Abstract

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 22 August 2015)
[No new relevant content identified]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 22 August 2015)
Research article
How intra-familial decision-making affects women's access to, and use of maternal healthcare services in Ghana: a qualitative study
John Ganle, Bernard Obeng, Alexander Segbefia, Vitalis Mwinyuri, Joseph Yeboah, Leonard Baatiema
BMC Pregnancy & Childbirth 2015, 15:173 (15 August 2015)
Abstract |

Research article
How do Malawian women rate the quality of maternal and newborn care? Experiences and perceptions of women in the central and southern regions
Christabel Kambala, Julia Lohmann, Jacob Mazalale, Stephan Brenner, Manuela De Allegri, Adamson Muula, Malabika Sarker
BMC Pregnancy & Childbirth 2015, 15:169 (15 August 2015)
Abstract

Research article
Birth location preferences of mothers and fathers in rural Ghana: Implications for pregnancy, labor and birth outcomes
Leslie Cofie, Clare Barrington, Kavita Singh, Sodzi Sodzi-Tettey, Akalpa Akaligaung
BMC Pregnancy & Childbirth 2015, 15:165 (12 August 2015)
Abstract

BMC Public Health
http://www.biomedcentral.com/bmcpublichealth/content
(Accessed 22 August 2015)
Research article
Understanding the socio-economic and sexual behavioural correlates of male circumcision across eleven voluntary medical male circumcision priority countries in southeastern Africa
Fiona Lau, Sylvia Jayakumar, Sema Sgaier
BMC Public Health 2015, 15:813 (22 August 2015)

Abstract |

Research article

Country characteristics and acute diarrhea in children from developing nations: a multilevel study

Ángela Pinzón-Rondón, Carol Zárate-Ardila, Alfonso Hoyos-Martínez, Ángela Ruiz-Sternberg, Alberto Vélez-van-Meerbeke

BMC Public Health 2015, 15:811 (21 August 2015)

Abstract

Research article

Improved coverage and timing of childhood vaccinations in two post-Soviet countries, Armenia and Kyrgyzstan

Schweitzer, G. Krause, F. Pessler, M. Akmatov

BMC Public Health 2015, 15:798 (19 August 2015)

Abstract

Background

Timing of childhood vaccinations has received close attention in many countries. Little is known about the trends in correctly timed vaccination in former Soviet countries. We examined trends in vaccination coverage and correct timing of vaccination in two post-Soviet countries, Armenia and Kyrgyzstan, and analyzed factors associated with delayed vaccinations.

Methods

We used data from the Demographic and Health Surveys; the surveys were conducted in 2000 (n = 1726), 2005 (n = 1430) and 2010 (n = 1473) in Armenia and in 1997 (n = 1127) and 2012 (n = 4363) in Kyrgyzstan. We applied the Kaplan-Meier method to estimate age-specific vaccination coverage with diphtheria, tetanus and pertussis (DTP) vaccine and a measles-containing vaccine (MCV). A Cox proportional hazard regression with shared frailty was used to examine factors associated with delayed vaccinations.

Results

Vaccination coverage for all three doses of the DTP vaccine increased in Armenia from 92 % in 2000 to 96 % in 2010. In Kyrgyzstan, DTP coverage was 96 % and 97 % in 1997 and 2012, respectively. Vaccination coverage for MCV increased from 89 % (Armenia, 2000) and 93 % (Kyrgyzstan, 1997) to 97 % (Armenia, 2010) and 98 % (Kyrgyzstan, 2012). The proportion of children with correctly timed vaccinations increased over time for all examined vaccinations in both countries. For example, the proportion of children in Armenia with correctly timed first DTP dose (DTP1) increased from 46 % (2000) to 66 % (2010). In Kyrgyzstan, the proportion of correctly timed DTP1 increased from 75 % (1997) to 87 % (2012). In Armenia, delays in the third DTP dose (DTP3) and MCV vaccinations were less likely to occur in the capital, whereas in Kyrgyzstan DTP3 and MCV start was delayed in the capital compared to other regions of the country. Also, in Armenia living in urban areas was associated with delayed vaccinations.

Conclusions

Vaccination coverage and timing of vaccination improved over the last years in both countries. Further efforts are needed to reduce regional differences in timely vaccinations.

Research article

Improving child survival through a district management strengthening and community empowerment intervention: early implementation experiences from Uganda

Anne Katahoire, Dorcus Henriksson, Eric Ssegujja, Peter Waiswa, Florence Ayebare, Danstan Bagenda, Anthony Mbonye, Stefan Peterson
BMC Public Health 2015, 15:797 (19 August 2015)
Abstract

Research article
Harmful practices in the management of childhood diarrhea in low- and middle-income countries: a systematic review
Emily Carter, Jennifer Bryce, Jamie Perin, Holly Newby
BMC Public Health 2015, 15:788 (18 August 2015)
Abstract

Research article
Multimorbidity and the inequalities of global ageing: a cross-sectional study of 28 countries using the World Health Surveys
Sara Afshar, Paul Roderick, Paul Kowal, Borislav Dimitrov, Allan Hill
BMC Public Health 2015, 15:776 (13 August 2015)
Abstract

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 22 August 2015)
[No new relevant content identified]

BMJ Open
2015, Volume 5, Issue 8
http://bmjopen.bmj.com/content/current
Research
The impact of HPV vaccination on future cervical screening: a simulation study of two birth cohorts in Denmark
Mie Sara Hestbech, Elsebeth Lynge, Jakob Kragstrup, Volkert Siersma, Miguel Vazquez-Prada Baillet, John Brodersen
BMJ Open 2015;5:e007921 doi:10.1136/bmjopen-2015-007921
[Abstract]

British Medical Journal
22 August 2015 (vol 351, issue 8022)
http://www.bmj.com/content/351/8022
[No relevant content identified]

15 August 2015 (vol 351, issue 8021)
http://www.bmj.com/content/351/8021
[No relevant content identified]

8 August 2015 (vol 351, issue 8020)

http://www.bmj.com/content/351/8020
[No relevant content identified]

Bulletin of the World Health Organization
Volume 93, Number 8, August 2015, 513-588
http://www.who.int/bulletin/volumes/93/8/en/
[Reviewed earlier]

Clinical Infectious Diseases (CID)
Volume 61 Issue 5 September 1, 2015
http://cid.oxfordjournals.org/content/current

Field Evaluation of Capillary Blood Samples as a Collection Specimen for the Rapid Diagnosis of Ebola Virus Infection During an Outbreak Emergency
Thomas Strecker, Bernadett Palyi, Heinz Ellerbrok, Sylvie Jonckheere, Hilde de Clerck, Joseph Akoi Bore, Martin Gabriel, Kilian Stoecker, Markus Eickmann, Michel van Herp, Pierre Formenty, Antonino Di Caro, and Stephan Becker
Clin Infect Dis. (2015) 61 (5): 669-675 doi:10.1093/cid/civ397
OPEN ACCESS
This study demonstrated the applicability of capillary blood samples as clinical specimens for field diagnosis of Ebola virus infection in an outbreak emergency.

Dose-Related Differences in Effectiveness of Human Papillomavirus Vaccination Against Genital Warts: A Nationwide Study of 550,000 Young Girls
Maria Blomberg, Christian Dehlendorff, Carsten Sand, and Susanne K. Kjaer
Clin Infect Dis. (2015) 61 (5): 676-682 doi:10.1093/cid/civ364
In this nationwide study, measurement of dose-related protection by human papillomavirus vaccination against genital warts showed that 3 vaccinations are required for maximal protection with the current regimen; 2 vaccinations may be sufficient if the dosing interval is extended.

Impact of the 13-Valent Pneumococcal Conjugate Vaccine on Pneumococcal Meningitis in US Children
Liset Olarte, William J. Barson, Ryan M. Barson, Philana Ling Lin, José R. Romero, Tina Q. Tan, Laurence B. Givner, John S. Bradley, Jill A. Hoffman, Kristina G. Hultén, Edward O. Mason, and Sheldon L. Kaplan
Clin Infect Dis. (2015) 61 (5): 767-775 doi:10.1093/cid/civ368
Pneumococcal meningitis cases among 8 children's hospitals remained unchanged after the introduction of 13-valent pneumococcal conjugate vaccine (PCV13). PCV13 serotypes represented 27% of cases. Antibiotic resistance decreased, largely related to declines in serotype 19A. Morbidity and case-fatality rate remain substantial.

Clinical Therapeutics
August 2015 Volume 37, Issue 8 , Supplement, e1-e170
http://www.clinicaltherapeutics.com/current

High dose favipiravir: first experience in a patient with Ebola

A.M. Borobia, M. Mora-Rillo, G. Ramírez Olivencia, M. Lago, M. Arsuaga, F. De la Calle, F. Arnalich, J.R. Arribas, A.J. Carcas
DOI: http://dx.doi.org/10.1016/j.clinthera.2015.05.054
Abstract
Background
On October 2014, the first case of human-to-human transmission of Ebola virus (EVOB) outside Africa was admitted in our hospital. Patient received supportive treatment and experimental treatment with convalescent plasma and antiviral was considered. Favipiravir (Toyama-Chemical) is a RNA polymerase inhibitor approved in Japan for the treatment of influenza, but with no previous experience in human EVOB infected patients.
Methods
The rational for favipiravir dose and schedule was based on recent in vitro and in vivo data in mice (Oesterech, 2014) showing an EBOV-IC90: 17 μg/mL and therapeutic efficacy: 300 mg/kg/d. Preclinical toxicology studies in monkeys settled a NOAEL of 100 mg/kg/d. Also pharmacokinetic data in healthy volunteers (loading dose/maintenance: 1200/600 BID) provided by Company was took in consideration: Cmax: 30–56 μg/mL, t1/2: 3.4–5.8 hr and plasma albumin binding: 53%. Based on this limited information, we decided a loading dose of 50 mg/kg BID (3 doses) and maintenance dose of 25 mg/kg TID. This schedule aimed to maintain a free Cmin above IC90 and as close as possible to 60 μg/mL of total concentration. Similar doses had been recommended after our decision (Mentré, 2014).
Results
Favipiravir was initiated on day 9 of illness (DOI-9) and stopped on DOI-20 after two consecutive undetectable EBOV plasma viral loads. Despite the high doses used, favipiravir was well tolerated, without adverse events clearly related to the drug. The patient fully recovered and was discharged on DOI-34.
Conclusions
The contribution of favipiravir to disease resolution is difficult to ascertain because the use of other therapies (convalescent plasma and supportive treatment) and the spontaneous evolution of the disease, which can all be related to the cure of our patient. However, considering the time to treatment initiation, the severity of the disease, and the high viral load, contribution of favipiravir to the outcome of our patient must be considered and support its role as experimental therapy.

Complexity
July/August 2015 Volume 20, Issue 6 Pages C1–C1, 1–97
http://onlinelibrary.wiley.com/doi/10.1002/cplx.v20.6/issuetoc
[Reviewed earlier]

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 22 August 2015]
Case study
Ebola in the context of conflict affected states and health systems: case studies of Northern Uganda and Sierra Leone
McPake B, Witter S, Ssali S, Wurie H, Namakula J and Ssengooba F Conflict and Health 2015, 9:23 (8 August 2015)

Contemporary Clinical Trials
Volume 43, In Progress (July 2015)
http://www.sciencedirect.com/science/journal/15517144/43
[Reviewed earlier]

Cost Effectiveness and Resource Allocation
http://www.resource-allocation.com/
(Accessed 22 August 2015)
Research
Cost-effectiveness analysis of routine immunization and supplementary immunization activity for measles in a health district of Benin
Kaucley L and Levy P Cost Effectiveness and Resource Allocation 2015, 13:14 (20 August 2015)
Abstract
Background
This study was carried out at district level to describe the cost structure and measure the effectiveness of delivering supplementary immunization activity (SIA) and routine immunization (RI) for measles in Benin, a country heavily affected by this disease.
Methods
This cost-effectiveness study was cross sectional and considered 1-year time horizon. RI consists to vaccinate an annual cohort of children aged 0–1 year old and SIA consists to provide a second dose of measles vaccine to children aged 0–5 years old in order to reach both those who did not seroconvert and who were not vaccinated through RI. Ingredients approach to costing was used. Effectiveness indicators included measles vaccine doses used, vaccinated children, measles cases averted and disability adjusted life years averted. Data were collected from all the 18 health care centers of the health district of Natitingou for the year 2011. In the analysis, the coverage was 89 % for RI and 104 % for SIA.
Results
SIA total cost was higher than RI total cost (15,796,560 FCFA versus 9,851,938 FCFA). Personnel and vaccines were the most important cost components for the two strategies. Fuel for cold chain took a non-negligible part of RI total cost (4.03 %) because 83 % of refrigerators were working with kerosene. Cost structures were disproportionate as social mobilization and trainings were not financed during RI contrarily to SIA. In comparison with no intervention, the two strategies combined permitted to avoid 12,671 measles cases or 19,023 DALYs. The benefit of SIA was 5601 measles cases averted and 6955 additional DALYs averted. Cost per vaccinated child for SIA (442 FCFA) was lower than for RI (1242 FCFA), in line with previous data from the literature. Cost per DALY averted was 2271 FCFA (4.73 USD) for SIA and 769 FCFA (1.60 USD) for RI. Analysis showed that low vaccine efficacy decreased the cost-effectiveness ratios for the two strategies. SIA was more cost-effective when the proportion of previously unvaccinated children was higher. For the two strategies, costs per DALY were more likely to vary with measles case fatality ratio.
Conclusions
SIA is costlier than RI. Both SIA and RI for measles are cost-effective interventions to improve health in Benin compared to no vaccination. Policy makers could make RI more efficient if sufficient funds were allocated to communications activities and to staff motivation (trainings, salaries).

Current Opinion in Infectious Diseases
August 2015 - Volume 28 - Issue 4 pp: v-vi,283-396
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
August 2015 Volume 15, Issue 2 Pages ii–iii, 59–114
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2015.15.issue-2/issuetoc
[Reviewed earlier]

Development in Practice
Volume 25, Issue 5, 2015
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Emerging Infectious Diseases
Volume 21, Number 8—August 2015
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

Epidemics
Volume 13, In Progress (December 2015)
http://www.sciencedirect.com/science/journal/17554365
[Reviewed earlier]

Epidemiology and Infection
Volume 143 - Issue 11 - August 2015
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
[Reviewed earlier]

The European Journal of Public Health
Volume 25, Issue 4, 1 August 2015
http://eurpub.oxfordjournals.org/content/25/4
[Reviewed earlier]

Eurosurveillance
Volume 20, Issue 33, 20 August 2015
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Research articles

Malaria knowledge, attitudes and practices among migrants from malaria-endemic countries in Evrotas, Laconia, Greece, 2013
by I Evlampidou, K Danis, A Lenglet, M Tseroni, Y Theocharopoulos, T Panagiotopoulos

Global Health: Science and Practice (GHSP)
June 2015 | Volume 3 | Issue 2
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Health Governance
http://blogs.shu.edu/ghg/category/complete-issues/spring-autumn-2014/
[Accessed 22 August 2015]
[No new relevant content]

Global Public Health
Volume 10, Issue 8, 2015
http://www.tandfonline.com/toc/rgph20/current
Legal and policy foundations for global generic competition: Promoting affordable drug pricing in developing societies
Pablo Zapatero Miguel
pages 901-916
DOI:10.1080/17441692.2015.1014824
Published online: 04 Mar 2015
Abstract
The so-called 'TRIPS flexibilities' restated in 2001 by the World Trade Organization's Doha Declaration on TRIPS and Public Health offer a variety of policy avenues for promoting global price-based competition for essential medicines, and thus for improving access to affordable medicines in the developing world. In recent years, developing countries and international organisations alike have begun to explore the potentialities of global generic markets and competition generally, and also of using compulsory licensing to remedy anti-competitive practices (e.g. excessive pricing) through TRIPS-compatible antitrust enforcement. These and other 'pro-competitive' TRIPS flexibilities currently available provide the critical leverage and policy space necessary to improve access to affordable medicines in the developing world.

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 22 August 2015]
Research
Attitudes and behaviours of maternal health care providers in interactions with clients: a systematic review
Mannava P, Durrant K, Fisher J, Chersich M and Luchters S Globalization and Health 2015, 11:36 (15 August 2015)

Research

Does Pharmaceutical Pricing Transparency Matter? Examining Brazil's Public Procurement System
Kohler JC, Mitsakakis N, Saadat F, Byng D and Martinez MG Globalization and Health 2015, 11:34 (4 August 2015)

Health Affairs
August 2015; Volume 34, Issue 8
http://content.healthaffairs.org/content/current
Some State Vaccination Laws Contribute To Greater Exemption Rates And Disease Outbreaks In The United States
W. David Bradford1,* and Anne Mandich2
Author Affiliations
1W. David Bradford (bradfowd@uga.edu) is the Busbee Chair in Public Policy in the Department of Public Administration and Policy at the University of Georgia, in Athens.
2Anne Mandich is a PhD candidate in the Department of Applied and Agricultural Economics at the University of Georgia.
Abstract
Health officials attest that immunizations are among the most successful interventions in public health. However, there remains a substantial unvaccinated population in the United States. We analyzed how state-level vaccination exemption laws affect immunization rates and the incidence of preventable disease. We measured the association between each component of state kindergarten vaccination exemption laws and state vaccination exemption rates from 2002 to 2012, using the Centers for Disease Control and Prevention's annual school assessment reports. We found that policies such as requiring health department approval of nonmedical exemptions, requiring a physician to sign an exemption application, and having criminal or civil punishments for noncompliance with immunization requirements had a significant effect in reducing vaccine exemptions. Our exemption law effectiveness index identified eighteen states with the most effective laws and nine states with the least effective ones. The most effective states had lower incidences of pertussis, compared to other states. For policy makers interested in decreasing the number of vaccine exemptions in their state, our findings are of particular interest.

Health and Human Rights
Volume 17, Issue 1 June 2015
http://www.hhrjournal.org/
Special Section on Bioethics and the Right to Health
in collaboration with the Dalla Lana School of Public Health, University of Toronto
[Reviewed earlier]

Health Economics, Policy and Law
Volume 10 - Issue 03 - July 2015
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[Reviewed earlier]

Health Policy and Planning
Volume 30 Issue 7 September 2015
http://heapol.oxfordjournals.org/content/current
Editor's Choice: Can the health system deliver? Determinants of rural Liberians' confidence in health care
Theodore Svoronos, Rose Jallah Macauley, and Margaret E Kruk
Health Policy Plan. (2015) 30 (7): 823-829 doi:10.1093/heapol/czu065
Abstract

The value of building health promotion capacities within communities: evidence from a maternal health intervention in Guinea
Ellen Brazier, Renée Fiorentino, Mamadou Saidou Barry, and Moustapha Diallo
Health Policy Plan. (2015) 30 (7): 885-894 doi:10.1093/heapol/czu089
Abstract

Increased use of recommended maternal health care as a determinant of immunization and appropriate care for fever and diarrhoea in Ghana: an analysis pooling three demographic and health surveys
Natalie McGlynn, Piotr Wilk, Isaac Luginaah, Bridget L Ryan, and Amardeep Thind
Health Policy Plan. (2015) 30 (7): 895-905 doi:10.1093/heapol/czu090
Abstract

Review
The effectiveness of community-based loan funds for transport during obstetric emergencies in developing countries: a systematic review
Chidiebere Hope Nwolise, Julia Hussein, Lovney Kanguru, Jacqueline Bell, and Purvi Patel
Health Policy Plan. (2015) 30 (7): 946-955 doi:10.1093/heapol/czu084
Abstract

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 22 August 2015]
No new digest content identified.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 11, Issue 6, 2015
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

Humanitarian Exchange Magazine
Issue 64 June 2015
http://www.odihpn.org/humanitarian-exchange-magazine/issue-64
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 22 August 2015]
[No new relevant content]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 22 August 2015]
[No new relevant content]

International Health
Volume 7 Issue 4 July 2015
http://inthealth.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Epidemiology
Volume 44 Issue 3 June 2015
http://ije.oxfordjournals.org/content/current
[New issue; No relevant content identified]

International Journal of Infectious Diseases
August 2015 Volume 37, p1
http://www.ijidonline.com/current
[Reviewed earlier]

JAMA
August 18, 2015, Vol 314, No. 7
http://jama.jamanetwork.com/issue.aspx
[New issue; No relevant content identified]

August 11, 2015, Vol 314, No. 6
http://jama.jamanetwork.com/issue.aspx?journalid=67&issueid=934298&direction=P
[No relevant content identified]

August 4, 2015, Vol 314, No. 5
http://jama.jamanetwork.com/issue.aspx?journalid=67&issueid=934282&direction=P
Viewpoint
The State of the World's Refugees: The Importance of Work, Cash Assistance, and Health Insurance
Paul B. Spiegel, MD, MPH

Psychological Treatments for Orphans and Vulnerable Children Affected by Traumatic Events and Chronic Adversity in Sub-Saharan Africa

Peter Ventevogel, MD; Paul Spiegel, MD, MPH
Abstract
Importance
Orphans and vulnerable children (OVC) are at high risk for experiencing trauma and related psychosocial problems. Despite this, no randomized clinical trials have studied evidence-based treatments for OVC in low-resource settings.
Objective
To evaluate the effectiveness of lay counselor–provided trauma-focused cognitive behavioral therapy (TF-CBT) to address trauma and stress-related symptoms among OVC in Lusaka, Zambia.
Design, Setting, and Participants
This randomized clinical trial compared TF-CBT and treatment as usual (TAU) (varying by site) for children recruited from August 1, 2012, through July 31, 2013, and treated until December 31, 2013, for trauma-related symptoms from 5 community sites within Lusaka, Zambia. Children were aged 5 through 18 years and had experienced at least one traumatic event and reported significant trauma-related symptoms. Analysis was with intent to treat.
Interventions The intervention group received 10 to 16 sessions of TF-CBT (n = 131). The TAU group (n = 126) received usual community services offered to OVC.
Main Outcomes and Measures
The primary outcome was mean item change in trauma and stress-related symptoms using a locally validated version of the UCLA Posttraumatic Stress Disorder Reaction Index (range, 0-4) and functional impairment using a locally developed measure (range, 0-4). Outcomes were measured at baseline and within 1 month after treatment completion or after a waiting period of approximately 4.5 months after baseline for TAU.
Results
At follow-up, the mean item change in trauma symptom score was −1.54 (95% CI, −1.81 to −1.27), a reduction of 81.9%, for the TF-CBT group and −0.37 (95% CI, −0.57 to −0.17), a reduction of 21.1%, for the TAU group. The mean item change for functioning was −0.76 (95% CI, −0.98 to −0.54), a reduction of 89.4%, and −0.54 (95% CI, −0.80 to −0.29), a reduction of 68.3%, for the TF-CBT and TAU groups, respectively. The difference in change between groups was statistically significant for both outcomes (P < .001). The effect size (Cohen d) was 2.39 for trauma symptoms and 0.34 for functioning. Lay counselors participated in supervision and assessed whether the intervention was provided with fidelity in all 5 community settings.
Conclusions and Relevance
The TF-CBT adapted for Zambia substantially decreased trauma and stress-related symptoms and produced a smaller improvement in functional impairment among OVC having experienced high levels of trauma.

JAMA Pediatrics
August 2015, Vol 169, No. 8
http://archpedi.jamanetwork.com/issue.aspx
Editorial | August 2015
Differentiating Sepsis From Adverse Events After Immunization in the Neonatal Intensive Care Unit - How Is a Physician to Know?
Michael W. Kuzniewicz, MD, MPH1,2,3; Nicola P. Klein, MD, PhD1,4
Extract

In this issue of JAMA Pediatrics, DeMeo et al[1] report on the incidence of adverse effects after immunization of extremely low-birth-weight (ELBW) infants in the neonatal intensive care unit (NICU). They report that there is an increase in the incidence of sepsis evaluations, respiratory support, and intubation after immunization.

The findings of this study confirm what a number of other retrospective studies have found—that ELBW infants appear to have an increase in cardiorespiratory events after vaccination. The main strength of this study and what makes it unique is its large sample size of infants born at less than 28 weeks' gestation, including those born at the most premature ages (ie, gestational ages [GAs] of 23-24 weeks). This study's large size further allowed evaluation of single antigen vs combination vaccines, with the authors concluding that there was no difference in the incidence of adverse events after varying vaccine types. This finding should provide some reassurances to neonatologists and parents….

Adverse Events After Routine Immunization of Extremely Low-Birth-Weight Infants

Stephen D. DeMeo, DO; Sudha R. Raman, PhD; Christoph P. Hornik, MD, MPH; Catherine C. Wilson, DNP, NNP-BC, FNP-BC; Reese Clark, MD; P. Brian Smith, MD, MPH, MHS

Abstract

Importance

Immunization of extremely low-birth-weight (ELBW) infants in the neonatal intensive care unit (NICU) is associated with adverse events, including fever and apnea or bradycardia, in the immediate postimmunization period. These adverse events present a diagnostic dilemma for physicians, leading to the potential for immunization delay and sepsis evaluations.

Objective

To compare the incidence of sepsis evaluations, need for increased respiratory support, intubation, seizures, and death among immunized ELBW infants in the 3 days before and after immunization.

Design, Setting, and Participants

In this multicenter retrospective cohort study, we studied 13 926 ELBW infants born at 28 weeks' gestation or less who were discharged from January 1, 2007, through December 31, 2012, from 348 NICUs managed by the Pediatrix Medical Group.

Exposures At least one immunization between the ages of 53 and 110 days.

Main Outcomes and Measures

Incidence of sepsis evaluations, need for increased respiratory support, intubation, seizures, and death.

Results

Most of the 13 926 infants (91.2%) received 3 or more immunizations. The incidence of sepsis evaluations increased from 5.4 per 1000 patient-days in the preimmunization period to 19.3 per 1000 patient-days in the postimmunization period (adjusted rate ratio [ARR], 3.7; 95% CI, 3.2-4.4). The need for increased respiratory support increased from 6.6 per 1000 patient-days in the preimmunization period to 14.0 per 1000 patient-days in the postimmunization period (ARR, 2.1; 95% CI, 1.9-2.5), and intubation increased from 2.0 per 1000 patient-days to 3.6 per 1000 patient-days (ARR, 1.7; 95% CI, 1.3-2.2). The postimmunization incidence of adverse events was similar across immunization types, including combination vaccines when compared with single-dose vaccines. Infants who were born at 23 to 24 weeks' gestation had a higher risk of sepsis evaluation and intubation after immunization. A prior history of sepsis was associated with higher risk of sepsis evaluation after immunization.

Conclusions and Relevance

All ELBW infants in the NICU had an increased incidence of sepsis evaluations and increased respiratory support and intubation after routine immunization. Our findings provide no evidence to suggest that physicians should not use combination vaccines in ELBW infants. Further studies are needed to determine whether timing or spacing of immunization administrations confers risk for the developing adverse events and whether a prior history of sepsis confers risk for an altered immune response in ELBW infants.

Journal of Community Health
Volume 40, Issue 4, August 2015
http://link.springer.com/journal/10900/40/4/page/1
[Reviewed earlier]

Journal of Epidemiology & Community Health
August 2015, Volume 69, Issue 8
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 11, Issue 2, 2015
http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0l#.VAJEj2N4WF8
[New issue; No relevant content identified]

Journal of Global Infectious Diseases (JGID)
July-September 2015 Volume 7 | Issue 3 Page Nos. 95-124
http://www.jgid.org/currentissue.asp?sabs=n
[New issue; No relevant content identified]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 26, Number 2, May 2015 Supplement
https://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.26.2A.html
SUPPLEMENT FOCUS: Shining the Light on Asian American, Native Hawaiian, and Pacific Islander Health
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 17, Issue 4, August 2015
http://link.springer.com/journal/10903/17/4/page/1
[Reviewed earlier]

Journal of Immigrant & Refugee Studies

Volume 13, Issue 2, 2015
http://www.tandfonline.com/toc/wimm20/current#.VQS0KOFnBhW
Special Issue: Implementing Human Rights: Civil Society and Migration Policies
[Reviewed earlier]

Journal of Infectious Diseases
Volume 212 Issue 3 August 1, 2015
http://jid.oxfordjournals.org/content/current
[Reviewed earlier]

The Journal of Law, Medicine & Ethics
Summer 2015 Volume 43, Issue 2 Pages 174–430
http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-1/issuetoc
Special Issue: SYMPOSIUM: Intersections in Reproduction: Perspectives on Abortion and Assisted Reproductive Technologies
[New issue; No relevant content identified]

Journal of Medical Ethics
August 2015, Volume 41, Issue 8
http://jme.bmj.com/content/current
[Reviewed earlier]

Journal of Medical Internet Research
Vol 17, No 5 (2015): May
http://www.jmir.org/2015/5
[Reviewed earlier]

Journal of Medical Microbiology
Volume 64, Issue 7, July 2015
http://jmm.sgmjournals.org/content/journal/jmm/64/7
[Reviewed earlier]

Journal of Patient-Centered Research and Reviews
Volume 2, Issue 3 (2015)
http://digitalrepository.aurorahealthcare.org/jpcrr/
[New issue; No relevant content identified]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 4 Issue 3 September 2015
http://jpids.oxfordjournals.org/content/current
Measles in Latin America: Current Situation

Robério Dias Leite1 and Eitan Naaman Berezin2

Extract

The Region of the Americas (North, Central, and South America and the Caribbean) successfully interrupted endemic measles transmission in 2002, but recent outbreaks in Latin America threaten to reverse this impressive achievement. Before widespread measles immunization in Latin America, measles was a common illness in early childhood and was associated with substantial mortality. During the 1960s, 600 000 measles cases were reported annually in the Region of the Americas [1]. Although measles vaccine was introduced during the 1960s, it was the creation of the World Health Organization (WHO) Expanded Program on Immunization in 1977 that marked the beginning of sustained decreases in case numbers. During 1970–1979, Latin American countries reported 220 000 measles cases annually, with incidence rates of 47–116 cases/100 000 population [2]. The highest mortality rates occurred among young children; from 1971 through 1980, measles associated mortality was 14–55 measles-associated deaths per 100 000 infants and 8–54 deaths/100 000 children aged 1–4 years. By 1980, most countries in the region had established national immunization programs; however, the mean infant measles vaccine coverage in the region was only 42%. In 2002, after more than 30 years of successful strategies and joint efforts of many countries in the region, interruption of endemic measles transmission in the Americas was achieved [3]. However, isolated cases continue to occur, due to the importation of measles from other areas of the world, sometimes causing short chains of transmissions over a few months…

Post-Licensure Surveillance of Trivalent Live-Attenuated Influenza Vaccine in Children Aged 2–18 Years, Vaccine Adverse Event Reporting System, United States, July 2005–June 2012

Penina Haber1, Pedro L. Moro1, Maria Cano1, Claudia Vellozzi1, Paige Lewis1, Emily Jane Woo2 and Karen Broder1

Author Affiliations

1Immunization Safety Office, Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia;

2Office of Biostatistics and Epidemiology, Center for Biologics Evaluation and Research, US Food and Drug Administration, Rockville, Maryland

Abstract

Background

The first trivalent live-attenuated influenza vaccine (LAIV3) was licensed in 2003 for use in healthy persons 5–49 years of age. In 2007, the US Food and Drug Administration expanded its indication to healthy children 2–4 years of age.

Methods

We searched the Vaccine Adverse Event Reporting System (VAERS) for US reports after LAIV3 from July 1, 2005 to June 30, 2012 in children aged 2–18 years. Medical records were requested for nonmanufacturer reports coded as serious (ie, death, hospitalization, prolonged hospitalization, life-threatening illness, disability). We characterized electronic data and clinically reviewed all serious reports and reports of special interest. Empirical Bayesian data mining was used to identify new or unexpected adverse events (AEs).

Results

During the study period, VAERS received 2619 US LAIV3 reports for children aged 2–18 years; 197 (7.5%) reports were serious, including 5 deaths. The 2 most frequent nonfatal serious reports involved neurological and respiratory systems, with 56 (29.2%) and 43 (22.4%) reports,

respectively. The most frequent neurological diagnoses were seizures and Guillain-Barré Syndrome, and the most frequent respiratory conditions were pneumonia and asthma or reactive airway disease. Data mining showed increased proportions for reports of medication errors, most commonly vaccine administration errors not associated with an AE.
Conclusions
In this VAERS analysis of reports following LAIV3, we found no new or unexpected AEs patterns. Reports of LAIV3 administration to persons, for whom it is not recommended, including children with a history of asthma or reactive airway disease or wheezing, indicate that ongoing monitoring and education in vaccine indications are needed.

Safety and Immunogenicity of Full-Dose Trivalent Inactivated Influenza Vaccine (TIV) Compared With Half-Dose TIV Administered to Children 6 Through 35 Months of Age

Natasha B. Halasa1, Michael A. Gerber2, Andrea A. Berry3, Edwin L. Anderson4, Patricia Winokur5, Harry Keyserling6, Allison Ross Eckard6, Heather Hill7, Mark C. Wolff7, Monica M. McNeal2, Kathryn M. Edwards1 and David I. Bernstein2
Author Affiliations
1Vanderbilt Vaccine Research Program, Department of Pediatrics, Vanderbilt University, Nashville, Tennessee
2Cincinnati Children's Hospital Medical Center, University of Cincinnati, Ohio
3Center for Vaccine Development, University of Maryland, Baltimore
4Department of Medicine, St Louis University, Missouri
5Department of Medicine, University of Iowa, Iowa City
6Department of Pediatrics, Emory University, Atlanta, Georgia
7EMMES Corporation, Rockville, Maryland
Abstract
Background Children 6 through 35 months of age are recommended to receive half the dose of influenza vaccine compared with older children and adults.
Methods This was a 6-site, randomized 2:1, double-blind study comparing full-dose (0.5 mL) trivalent inactivated influenza vaccine (TIV) with half-dose (0.25 mL) TIV in children 6 through 35 months of age. Children previously immunized with influenza vaccine (primed cohort) received 1 dose, and those with no previous influenza immunizations (naive cohort) received 2 doses of TIV. Local and systemic adverse events were recorded. Sera were collected before immunization and 1 month after last dose of TIV. Hemagglutination inhibition antibody testing was performed.
Results Of the 243 subjects enrolled (32 primed, 211 naive), data for 232 were available for complete analysis. No significant differences in local or systemic reactions were observed. Few significant differences in immunogenicity to the 3 vaccine antigens were noted. The immune response to H1N1 was significantly higher in the full-dose group among primed subjects. In the naive cohort, the geometric mean titer for all 3 antigens after 2 doses of TIV were significantly higher in the 12 through 35 months compared with the 6 through 11 months age group.
Conclusions Our study confirms the safety of full-dose TIV given to children 6 through 35 months of age. An increase in antibody responses after full- versus half-dose TIV was not observed, except for H1N1 in the primed group. Larger studies are needed to clarify the potential for improved immunogenicity with higher vaccine doses. Recommending the same dose could simplify the production, storage, and administration of influenza vaccines.

Journal of Pediatrics
August 2015 Volume 167, Issue 2, p219-502
http://www.jpeds.com/current
[Reviewed earlier]

Journal of Public Health Policy
Volume 36, Issue 2 (May 2015)
http://www.palgrave-journals.com/jphp/journal/v36/n2/index.html
[Reviewed earlier]

Journal of the Royal Society – Interface
06 August 2015; volume 12, issue 109
http://rsif.royalsocietypublishing.org/content/current
[Reviewed earlier]

Journal of Virology
August 2015, Volume 89, Issue 15
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Aug 22, 2015 Volume 386 Number 9995 p717-828 e7-e8
http://www.thelancet.com/journals/lancet/issue/current
Articles
Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013
Global Burden of Disease Study 2013 Collaborators(
Theo Vos, et al
Published Online: 07 June 2015
DOI: http://dx.doi.org/10.1016/S0140-6736(15)60692-4
Summary
Background
Up-to-date evidence about levels and trends in disease and injury incidence, prevalence, and years lived with disability (YLDs) is an essential input into global, regional, and national health policies. In the Global Burden of Disease Study 2013 (GBD 2013), we estimated these quantities for acute and chronic diseases and injuries for 188 countries between 1990 and 2013.
Methods
Estimates were calculated for disease and injury incidence, prevalence, and YLDs using GBD 2010 methods with some important refinements. Results for incidence of acute disorders and prevalence of chronic disorders are new additions to the analysis. Key improvements include expansion to the cause and sequelae list, updated systematic reviews, use of detailed injury codes, improvements to the Bayesian meta-regression method (DisMod-MR), and use of severity splits for various causes. An index of data representativeness, showing data availability,

was calculated for each cause and impairment during three periods globally and at the country level for 2013. In total, 35 620 distinct sources of data were used and documented to calculated estimates for 301 diseases and injuries and 2337 sequelae. The comorbidity simulation provides estimates for the number of sequelae, concurrently, by individuals by country, year, age, and sex. Disability weights were updated with the addition of new population-based survey data from four countries.

Findings

Disease and injury were highly prevalent; only a small fraction of individuals had no sequelae. Comorbidity rose substantially with age and in absolute terms from 1990 to 2013. Incidence of acute sequelae were predominantly infectious diseases and short-term injuries, with over 2 billion cases of upper respiratory infections and diarrhoeal disease episodes in 2013, with the notable exception of tooth pain due to permanent caries with more than 200 million incident cases in 2013. Conversely, leading chronic sequelae were largely attributable to non-communicable diseases, with prevalence estimates for asymptomatic permanent caries and tension-type headache of 2·4 billion and 1·6 billion, respectively. The distribution of the number of sequelae in populations varied widely across regions, with an expected relation between age and disease prevalence. YLDs for both sexes increased from 537·6 million in 1990 to 764·8 million in 2013 due to population growth and ageing, whereas the age-standardised rate decreased little from 114·87 per 1000 people to 110·31 per 1000 people between 1990 and 2013. Leading causes of YLDs included low back pain and major depressive disorder among the top ten causes of YLDs in every country. YLD rates per person, by major cause groups, indicated the main drivers of increases were due to musculoskeletal, mental, and substance use disorders, neurological disorders, and chronic respiratory diseases; however HIV/AIDS was a notable driver of increasing YLDs in sub-Saharan Africa. Also, the proportion of disability-adjusted life years due to YLDs increased globally from 21·1% in 1990 to 31·2% in 2013.

Interpretation

Ageing of the world's population is leading to a substantial increase in the numbers of individuals with sequelae of diseases and injuries. Rates of YLDs are declining much more slowly than mortality rates. The non-fatal dimensions of disease and injury will require more and more attention from health systems. The transition to non-fatal outcomes as the dominant source of burden of disease is occurring rapidly outside of sub-Saharan Africa. Our results can guide future health initiatives through examination of epidemiological trends and a better understanding of variation across countries.

Funding

Bill & Melinda Gates Foundation.

Viewpoint

Responsibility and accountability for well informed health-care decisions: a global challenge

Prof Gro Jamtvedt, PhD, Prof Marianne Klemp, PhD, Berit Mørland, PhD, Prof Magne Nylenna, PhD

Published Online: 14 June 2015

August 15, 2015 No. 9994, p625-716, e2-e6

http://www.thelancet.com/journals/lancet/issue/vol386no9994/PIIS0140-6736%2815%29X6155-1

[No relevant content identified]

August 8, 2015 No. 9993, p503-624
http://www.thelancet.com/journals/lancet/issue/vol386no9993/PIIS0140-6736%2815%29X6154-X
Comment
The Vancouver Consensus: antiretroviral medicines, medical evidence, and political will
Chris Beyrer, Deborah L Birx, Linda-Gail Bekker, Françoise Barré-Sinoussi, Pedro Cahn, Mark R Dybul, Serge P Eholié, Matthew M Kavanagh, Elly T Katabira, Jens D Lundgren, Lilian Mworeko, Marama Pala, Thanyawee Puttanakit, Owen Ryan, Michel Sidibé, Julio S G Montaner on behalf of the Vancouver Consensus Signatories (appendix)
[No abstract]

The Lancet Global Health
Sep 2015 Volume 3 Number 9 e501-e576
http://www.thelancet.com/journals/langlo/issue/current
Comment
Ethics in global health research: the need for balance
Lauren C Ng, Charlotte Hanlon, Getnet Yimer, David C Henderson, Abebaw Fekadu
Open Access
DOI: http://dx.doi.org/10.1016/S2214-109X(15)00095-9
Summary
Global health research often needs collaboration between various organisations and oversight from many research ethics committees (RECs), including those from partner institutions, national committees, ministries of health, and funders, which increases administrative burden and time. Maintenance of the highest ethical standards in research is paramount; unfortunately ethics breaches are not uncommon.1 In view of the real possibility of ethical wrongdoing, worldwide health research must abide by transparent, rigorous, and effective procedures of ethics review.

Trends and mortality effects of vitamin A deficiency in children in 138 low-income and middle-income countries between 1991 and 2013: a pooled analysis of population-based surveys
Gretchen A Stevens, James E Bennett, Quentin Hennocq, Yuan Lu, Luz Maria De-Regil, Lisa Rogers, Goodarz Danaei, Guangquan Li, Richard A White, Seth R Flaxman, Sean-Patrick Oehrle, Mariel M Finucane, Ramiro Guerrero, Zulfiqar A Bhutta, Amarilis Then-Paulino, Wafaie Fawzi, Robert E Black, Majid Ezzati
e528
Summary
Background
Vitamin A deficiency is a risk factor for blindness and for mortality from measles and diarrhoea in children aged 6–59 months. We aimed to estimate trends in the prevalence of vitamin A deficiency between 1991 and 2013 and its mortality burden in low-income and middle-income countries.
Methods
We collated 134 population-representative data sources from 83 countries with measured serum retinol concentration data. We used a Bayesian hierarchical model to estimate the prevalence of vitamin A deficiency, defined as a serum retinol concentration lower than 0·70

µmol/L. We estimated the relative risks (RRs) for the effects of vitamin A deficiency on mortality from measles and diarrhoea by pooling effect sizes from randomised trials of vitamin A supplementation. We used information about prevalences of deficiency, RRs, and number of cause-specific child deaths to estimate deaths attributable to vitamin A deficiency. All analyses included a systematic quantification of uncertainty.
Findings
In 1991, 39% (95% credible interval 27–52) of children aged 6–59 months in low-income and middle-income countries were vitamin A deficient. In 2013, the prevalence of deficiency was 29% (17–42; posterior probability [PP] of being a true decline=0·81). Vitamin A deficiency significantly declined in east and southeast Asia and Oceania from 42% (19–70) to 6% (1–16; PP>0·99); a decline in Latin America and the Caribbean from 21% (11–33) to 11% (4–23; PP=0·89) also occurred. In 2013, the prevalence of deficiency was highest in sub-Saharan Africa (48%; 25–75) and south Asia (44%; 13–79). 94 500 (54 200–146 800) deaths from diarrhoea and 11 200 (4300–20 500) deaths from measles were attributable to vitamin A deficiency in 2013, which accounted for 1·7% (1·0–2·6) of all deaths in children younger than 5 years in low-income and middle-income countries. More than 95% of these deaths occurred in sub-Saharan Africa and south Asia.
Interpretation
Vitamin A deficiency remains prevalent in south Asia and sub-Saharan Africa. Deaths attributable to this deficiency have decreased over time worldwide, and have been almost eliminated in regions other than south Asia and sub-Saharan Africa. This new evidence for both prevalence and absolute burden of vitamin A deficiency should be used to reconsider, and possibly revise, the list of priority countries for high-dose vitamin A supplementation such that a country's priority status takes into account both the prevalence of deficiency and the expected mortality benefits of supplementation.
Funding
Bill & Melinda Gates Foundation, Grand Challenges Canada, UK Medical Research Council.

The Lancet Infectious Diseases
Aug 2015 Volume 15 Number 8 p863-986
http://www.thelancet.com/journals/laninf/issue/current
Comment
New vaccine strategies to finish polio eradication
Nicholas C Grassly
Published Online: 17 June 2015
Summary
The Global Polio Eradication Initiative (GPEI) currently faces two specific challenges. First, all the cases in the past 9 months caused by ongoing wild-virus transmission were in Afghanistan and Pakistan—Africa has had a remarkable 9 months without detection of the disease. Second, circulating vaccine-derived polioviruses are continuing to cause poliomyelitis in a few countries, a rare outcome associated with continued use of the live-attenuated oral poliovirus vaccine (OPV). In The Lancet Infectious Diseases, the results of two clinical trials of OPV that address these challenges are reported by Fatima Mir and colleagues1 and Concepción Estívariz and colleagues.

Comment
Making mandatory vaccination truly compulsory: well intentioned but ill conceived

Daniel A Salmon, C Raina MacIntyre, Saad B Omer
Summary
The USA, Australia, and about half of European countries have mandatory vaccination requirements.1,2 The experience of the USA and Australia has been well studied. In the USA, vaccine mandates are implemented through requirements for proof of vaccination or exemption at school entry. In Australia, many provinces have school entry requirements and nationally mandated vaccination has traditionally been implemented by denial of childcare benefits to those who refuse vaccines—unless they provide proof of exemptions.

Monovalent type-1 oral poliovirus vaccine given at short intervals in Pakistan: a randomised controlled, four-arm, open-label, non-inferiority trial
Fatima Mir, Farheen Quadri, Ondrej Mach, Imran Ahmed, Zaid Bhatti, Asia Khan, Najeeb ur Rehman, Elias Durry, Maha Salama, Steven M Oberste, William C Weldon, Roland W Sutter, Anita K M Zaidi

Immunogenicity of three doses of bivalent, trivalent, or type 1 monovalent oral poliovirus vaccines with a 2 week interval between doses in Bangladesh: an open-label, non-inferiority, randomised, controlled trial
Concepción F Estívariz, Abhijeet Anand, Howard E Gary Jr, Mahmudur Rahman, Jannatul Islam, Tajul I Bari, Steven G F Wassilak, Susan Y Chu, William C Weldon, Mark A Pallansch, James D Heffelfinger, Stephen P Luby, Khalequ Zaman

Long-term sequelae after Ebola virus disease in Bundibugyo, Uganda: a retrospective cohort study
Danielle V Clark, Hannah Kibuuka, Monica Millard, Salim Wakabi, Luswa Lukwago, Alison Taylor, Michael A Eller, Leigh Anne Eller, Nelson L Michael, Anna N Honko, Gene G Olinger Jr, Randal J Schoepp, Matthew J Hepburn, Lisa E Hensley, Merlin L Robb
905

Maternal and Child Health Journal
Volume 19, Issue 8, August 2015
http://link.springer.com/journal/10995/19/8/page/1
[Reviewed earlier]

Medical Decision Making (MDM)
August 2015; 35 (6)
http://mdm.sagepub.com/content/current
[New issue; No relevant content identified]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
June 2015 Volume 93, Issue 2 Pages 223–445

http://onlinelibrary.wiley.com/doi/10.1111/milq.2015.93.issue-2/issuetoc
[Reviewed earlier]

Nature
Volume 524 Number 7565 pp265-382 20 August 2015
http://www.nature.com/nature/current_issue.html
World View
Tackle Nepal's typhoid problem now
As post-earthquake conditions increase the risk of a typhoid epidemic, Buddha Basnyat calls for a widespread vaccination programme.

Volume 524 Number 7564 pp137-260 13 August 2015
http://www.nature.com/nature/journal/v524/n7564/index.html
[No relevant content identified]

Volume 524 Number 7563 pp5-130 6 August 2015
http://www.nature.com/nature/journal/v524/n7563/index.html
Editorial
Trial and triumph
The success of an Ebola vaccine trial shows that clinical trials can be done under the difficult field conditions of an epidemic — if there is enough political and regulatory will.

World View
Train Africa's scientists in crisis response
To prevent future epidemics, a new international effort must boost West Africa's scientific and public-health capacity, says Christian Bréchot.

Comment
Disease outbreak: Finish the fight against Ebola
Leaders and health agencies are talking about 'lessons learned' from West Africa's Ebola epidemic. But a major push is needed to end the outbreak, urges Joanne Liu.

Ebola: Embed research in outbreak response
Testing Ebola treatments in West Africa's epidemic happened too late. Research response during future outbreaks must be more nimble, says Trudie Lang.

Genetic diversity and evolutionary dynamics of Ebola virus in Sierra Leone Open
Yi-Gang Tong, Wei-Feng Shi, Di Liu, Jun Qian, Long Liang+ et al.
The genome sequences of 175 Ebola virus from five districts in Sierra Leone, collected during September–November 2014, show that the rate of virus evolution seems to be similar to that observed during previous outbreaks and that the genetic diversity of the virus has increased substantially, with the emergence of several novel lineages.

Temporal and spatial analysis of the 2014–2015 Ebola virus outbreak in West Africa
Open
Miles W. Carroll, David A. Matthews, Julian A. Hiscox, Michael J. Elmore, Georgios Pollakis + et al.

Analysis of 179 new Ebola virus sequences from patient samples collected in Guinea between March 2014 and January 2015 shows how different lineages evolved and spread in West Africa.

Genetic diversity and evolutionary dynamics of Ebola virus in Sierra Leone Open
Yi-Gang Tong, Wei-Feng Shi, Di Liu, Jun Qian, Long Liang+ et al.
The genome sequences of 175 Ebola virus from five districts in Sierra Leone, collected during September–November 2014, show that the rate of virus evolution seems to be similar to that observed during previous outbreaks and that the genetic diversity of the virus has increased substantially, with the emergence of several novel lineages.

Nature Medicine
August 2015, Volume 21 No 8 pp828-961
http://www.nature.com/nm/journal/v21/n8/index.html
[New issue; No relevant content identified]

Nature Reviews Immunology
July 2015 Vol 15 No 7
http://www.nature.com/nri/journal/v15/n7/index.html
[Reviewed earlier]

New England Journal of Medicine
August 20, 2015 Vol. 373 No. 8
http://www.nejm.org/toc/nejm/medical-journal
[New issue; No relevant content identified]

August 13, 2015 Vol. 373 No. 7
http://www.nejm.org/toc/nejm/373/7
[No relevant content identified]

August 6, 2015 Vol. 373 No. 6
http://www.nejm.org/toc/nejm/373/6
[No relevant content identified]

Pediatrics
August 2015, VOLUME 136 / ISSUE 2
http://pediatrics.aappublications.org/current.shtml
[Reviewed earlier]

Pharmaceutics
Volume 7, Issue 2 (June 2015), Pages 10-
http://www.mdpi.com/1999-4923/7/2
[Reviewed earlier]

Pharmacoeconomics
Volume 33, Issue 8, August 2015
http://link.springer.com/journal/40273/33/8/page/1
Commentary
Development and Use of Disease-Specific (Reference) Models for Economic Evaluations of Health Technologies: An Overview of Key Issues and Potential Solutions
Gerardus W. J. Frederix, Hossein Haji Ali Afzali, Erik J. Dasbach…
[No abstract]

Systematic Review
The Economic Costs of Type 2 Diabetes: A Global Systematic Review
Till Seuring, Olga Archangelidi, Marc Suhrcke
Abstract
Objective
In view of the goal of eliminating tuberculosis (TB) by 2050, economic evaluations of interventions against the development of TB are increasingly requested. Little research has been published on the incremental cost effectiveness of preventative therapy (PT) in groups at high risk for progression from latent TB infection (LTBI) with Mycobacterium TB (MTB) to active disease. A systematic review of studies with a primary focus on model-driving inputs and methodological differences was conducted.
Methods
A search of MEDLINE, the Cochrane Library and EMBASE to July 2014 was undertaken, and reference lists of eligible articles and relevant reviews were examined.
Results
A total of 876 citations were retrieved, with a total of 24 studies being eligible for inclusion, addressing six high-risk groups other than contact persons. Results varied considerably between studies and countries, and also over time. Although the selected studies generally demonstrated cost effectiveness for PT in HIV-infected subjects and healthcare workers (HCWs), the outcome of these analyses can be questioned in light of recent epidemiologic data. For immigrants from high TB-burden countries, patients with end-stage renal disease, and the immunosuppressed, now defined as further vulnerable groups, no consistent recommendation can be taken from the literature with respect to cost effectiveness of screening and treating LTBI. When the concept of a fixed willingness-to-pay (WTP) threshold as a prerequisite for final categorization was used, the sums ranged between 'no specification' and US$100,000 per quality-adjusted life-year.
Conclusions
To date, incremental cost-effectiveness analyses on PT in groups at high risk for TB progression, other than contacts, are surprisingly scarce. The variation found between studies likely reflects variations in the major epidemiologic factors, particularly in the estimates on the accuracy of the tuberculin skin test (TST) and interferon-gamma release assays (IGRA) as screening methods used before considering PT. Further research, including explicit evaluation of local epidemiological conditions, test accuracy, and methodology of WTP thresholds, is needed.

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
(Accessed 22 August 2015)

Novel Human-like Influenza A Viruses Circulate in Swine in Mexico and Chile

August 13, 2015 · Research

Abstract

Introduction: Further understanding of the genetic diversity and evolution of influenza A viruses circulating in swine (IAV-S) is important for the development of effective vaccines and our knowledge of pandemic threats. Until recently, very little was known of IAV-S diversity in Latin America, owing to a lack of surveillance.

Methods: To address this gap, we sequenced and conducted a phylogenetic analysis of 69 hemagglutinin (HA) sequences from IAV-S isolates collected in swine in Mexico and Chile during 2010-2014, including the H1N1, H1N2, and H3N2 subtypes.

Results: Our analysis identified multiple IAV-S lineages that appear to have been circulating undetected in swine for decades, including four novel IAV-S lineages of human seasonal virus origin that have not been previously identified in any swine populations globally. We also found evidence of repeated introductions of pandemic H1N1 viruses from humans into swine in Mexico and Chile since 2009, and incursions of H1 and H3 viruses from North American swine into Mexico.

Discussion: Overall, our findings indicate that at least 12 genetically distinct HA lineages circulate in Latin American swine herds, only two of which have been found in North American swine herds. Human-to-swine transmission, spatial migration via swine movements, and genomic reassortment are the key evolutionary mechanisms that generate this viral diversity. Additional antigenic characterization and whole-genome sequencing is greatly needed to understand the diversity and independent evolution of IAV-S in Latin America.

Rapid Assessment of Ebola-Related Implications for Reproductive, Maternal, Newborn and Child Health Service Delivery and Utilization in Guinea

August 4, 2015 · Research

Introduction: Since March 2014, Guinea has been in the midst of the largest, longest, and deadliest outbreak of Ebola Virus Disease ever recorded. Due to sub-optimal health conditions prior to the outbreak, Guinean women and children may have been especially vulnerable to worsening health care conditions. A rapid assessment was conducted to better understand how the delivery and utilization of routine RMNCH services may have been affected by the extraordinary strain placed on the health system and its client population by the Ebola outbreak in Guinea.

Methods: Data were collected January-February 2015 in a convenience sample of public and private facilities in areas of the country that were Ebola active, calm and inactive. Monthly data on a number of RMNCH services were collected by facility record abstraction for the period from October 1, 2013 through December 31, 2014. Structured interviews were also held with facility directors and RMNCH service providers.

Results: Data on RMNCH services from forty five public facilities were obtained. A statistically significant decline of 31% was seen in outpatient visits between October-December 2013 (before the Ebola outbreak) and October-December 2014 (the advanced stage of the Ebola outbreak). Service declines appeared to be greater in hospitals compared to health centers. Child health services were more affected by the Ebola epidemic than other assessed health areas. For example, the number of children under five seen for diarrhea and Acute Respiratory Infection (ARI) showed a large decrease over the one-year period in both hospitals (60% for diarrhea and 58% for ARI) and health centers (25% and 23%, respectively). Results also suggest that the negative effects on service availability (such as reduced hours, closures, and service suspensions) are likely to be regional and/or facility-specific. Providers reported a

number of improved infection control behaviors as a result of the Ebola outbreak, including more frequent hand-washing and the use of disinfectants. Nevertheless, 30% of interviewed staff had not received any training on Ebola infection control.
Discussion: Although there may be differences in RMNCH service delivery and availability in selected versus non-selected facilities, a large number of indicators were assessed in order to provide needed information on the effects of the Ebola crisis on routine RMNCH service delivery and uptake in Guinea. This information is an important and timely contribution to ongoing efforts to understand and respond to the adverse effects of the Ebola crisis on essential RMNCH services in Guinea.

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 22 August 2015)
No new digest content identified.

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 22 August 2015)
Viewpoints
Responsible Use of Pop Culture and Communication in the Face of Ebola Virus
Brandon Brown, Melissa Nasiruddin, Alexander Dao, Monique Halabi
Published: August 6, 2015
DOI: 10.1371/journal.pntd.0003890
…*Current Use of Pop Culture in the Ebola Epidemic*
The CDC, the World Health Organization (WHO), and other public health agencies have leveraged popular social media to distribute up-to-date and accurate information on Ebola [7,8], while social websites such as Reddit, to which users can submit content organized by areas of interest, allow for the assimilation of unverified information [9]. A literature review on the use of social networking sites for influencing health behavior demonstrated a particularly valuable aspect of social media: its cost-effective ability to reach hard-to-reach underserved and minority populations [10]. Health information reaches consumers at various levels that differ based on demographic and socioeconomic factors. For example, data from the Health Information National Trends Survey found that individuals who sought out health information tended to have regular health care access and were more likely to earn over US$50,000 in income; conversely, males, people older than 65 years of age, and people identifying as Hispanic were less likely to seek out that information [11]. Because of differences in how these groups receive, trust, and process health information, mechanisms by which pertinent health information is disseminated must be diversified in order to maximize the audience reached. This can be done through media accessed by members of multiple socioeconomic and cultural strata. Examples of useful media include film, books, pamphlets, the Internet, and crowdsource mapping, among others. Smart phone apps and health reminders through text messages are some ways that technology has been used to help raise awareness about the epidemic [12,13], but there are still other ways that social media and popular culture can be used to further spread vital public health information. The public is eager for this information, as clearly demonstrated with the success of television programs such as the Dr. Oz show in promoting information-seeking behavior [14]…

PLoS One
http://www.plosone.org/
[Accessed 22 August 2015]

Towards a Science of Community Stakeholder Engagement in Biomedical HIV Prevention Trials: An Embedded Four-Country Case Study

Peter A. Newman, Clara Rubincam, Catherine Slack, Zaynab Essack, Venkatesan Chakrapani, Deng-Min Chuang, Suchon Tepjan, Murali Shunmugam, Surachet Roungprakhon, Carmen Logie, Jennifer Koen, Graham Lindegger
Research Article | published 21 Aug 2015 | PLOS ONE
10.1371/journal.pone.0135937

Research Article

Measuring Health Utilities in Children and Adolescents: A Systematic Review of the Literature

Dominic Thorrington, Ken Eames
Published: August 14, 2015
DOI: 10.1371/journal.pone.0135672

Abstract

Background

The objective of this review was to evaluate the use of all direct and indirect methods used to estimate health utilities in both children and adolescents. Utilities measured pre- and post-intervention are combined with the time over which health states are experienced to calculate quality-adjusted life years (QALYs). Cost-utility analyses (CUAs) estimate the cost-effectiveness of health technologies based on their costs and benefits using QALYs as a measure of benefit. The accurate measurement of QALYs is dependent on using appropriate methods to elicit health utilities.

Objective

We sought studies that measured health utilities directly from patients or their proxies. We did not exclude those studies that also included adults in the analysis, but excluded those studies focused only on adults.

Methods and Findings

We evaluated 90 studies from a total of 1,780 selected from the databases. 47 (52%) studies were CUAs incorporated into randomised clinical trials; 23 (26%) were health-state utility assessments; 8 (9%) validated methods and 12 (13%) compared existing or new methods. 22 unique direct or indirect calculation methods were used a total of 137 times. Direct calculation through standard gamble, time trade-off and visual analogue scale was used 32 times. The EuroQol EQ-5D was the most frequently-used single method, selected for 41 studies. 15 of the methods used were generic methods and the remaining 7 were disease-specific. 48 of the 90 studies (53%) used some form of proxy, with 26 (29%) using proxies exclusively to estimate health utilities.

Conclusions

Several child- and adolescent-specific methods are still being developed and validated, leaving many studies using methods that have not been designed or validated for use in children or adolescents. Several studies failed to justify using proxy respondents rather than administering the methods directly to the patients. Only two studies examined missing responses to the methods administered with respect to the patients' ages.

Knowledge on HPV Vaccine and Cervical Cancer Facilitates Vaccine Acceptability among School Teachers in Kitui County, Kenya

Moses Muia Masika, Javier Gordon Ogembo, Sophie Vusha Chabeda, Richard G. Wamai, Nelly Mugo

Research Article | published 12 Aug 2015 | PLOS ONE
10.1371/journal.pone.0135563

Abstract

Background

Vaccines against human papillomavirus (HPV) infection have the potential to reduce the burden of cervical cancer. School-based delivery of HPV vaccines is cost-effective and successful uptake depends on school teachers' knowledge and acceptability of the vaccine. The aim of this study is to assess primary school teachers' knowledge and acceptability of HPV vaccine and to explore facilitators and barriers of an ongoing Gavi Alliance-supported vaccination program in Kitui County, Kenya.

Methods

This was a cross-sectional, mixed methods study in Central Division of Kitui County where the Ministry of Health is offering the quadrivalent HPV vaccine to grade four girls. Data on primary school teachers' awareness, knowledge and acceptability of HPV vaccine as well as facilitators and barriers to the project was collected through self-administered questionnaires and two focus group discussions.

Results

339 teachers (60% female) completed the survey (62% response rate) and 13 participated in 2 focus group discussions. Vaccine awareness among teachers was high (90%), the level of knowledge about HPV and cervical cancer among teachers was moderate (48%, SD = 10.9) and females scored higher than males (50% vs. 46%, $p = 0.002$). Most teachers (89%) would recommend the vaccine to their daughter or close relatives. Those who would recommend the vaccine had more knowledge than those who would not ($p = <0.001$). The main barriers were insufficient information about the vaccine, poor accessibility of schools, absenteeism of girls on vaccine days, and fear of side effects.

Conclusions

Despite low to moderate levels of knowledge about HPV vaccine among school teachers, vaccine acceptability is high. Teachers with little knowledge on HPV vaccine are less likely to accept the vaccine than those who know more; this may affect uptake if not addressed. Empowering teachers to be vaccine champions in their community may be a feasible way of disseminating information about HPV vaccine and cervical cancer.

Use of Mobile Information Technology during Planning, Implementation and Evaluation of a Polio Campaign in South Sudan

John Haskew, Veronica Kenyi, Juma William, Rebecca Alum, Anu Puri, Yehia Mostafa, Robert Davis

Research Article | published 07 Aug 2015 | PLOS ONE
10.1371/journal.pone.0135362

Abstract

Background

Use of mobile information technology may aid collection of real-time, standardised data to inform and improve decision-making for polio programming and response. We utilised Android-based smartphones to collect data electronically from more than 8,000 households during a

national round of polio immunisation in South Sudan. The results of the household surveys are presented here, together with discussion of the application of mobile information technology for polio campaign planning, implementation and evaluation in a real-time setting.
Methods
Electronic questionnaires were programmed onto Android-based smartphones for mapping, supervision and survey activities during a national round of polio immunisation. National census data were used to determine the sampling frame for each activity and select the payam (district). Individual supervisors, in consultation with the local district health team, selected villages and households within each payam. Data visualisation tools were utilised for analysis and reporting.
Results
Implementation of mobile information technology and local management was feasible during a national round of polio immunisation in South Sudan. Red Cross visits during the polio campaign were equitable according to household wealth index and households who received a Red Cross visit had significantly higher odds of being aware of the polio campaign than those who did not. Nearly 95% of children under five were reported to have received polio immunisation (according to maternal recall) during the immunisation round, which varied by state, county and payam. A total of 11 payams surveyed were identified with less than 90% reported immunisation coverage and the least poor households had significantly higher odds of being vaccinated than the most poor. More than 95% of households were aware of the immunisation round and households had significantly higher odds of being vaccinated if they had prior awareness of the campaign taking place.
Conclusion
Pre-campaign community education and household awareness of polio is important to increase campaign participation and subsequent immunisation coverage in South Sudan. More emphasis should be placed on ensuring immunisation is equitable according to geographic area and household socio-economic index in future rounds. We demonstrate the utility of mobile information technology for household mapping, supervision and survey activities during a national round of polio immunisation and encourage future studies to compare the effectiveness of electronic data collection and its application in polio planning and programming.

PLoS Pathogens

http://journals.plos.org/plospathogens/
(Accessed 22 August 2015)

The Ebola Virus: From Basic Research to a Global Health Crisis

Robert V. Stahelin
Research Matters | published 13 Aug 2015 | PLOS Pathogens
10.1371/journal.ppat.1005093

Interdisciplinarity and Infectious Diseases: An Ebola Case Study

Vanessa O. Ezenwa, Anne-Helene Prieur-Richard, Benjamin Roche, Xavier Bailly, Pierre Becquart, Gabriel E. García-Peña, Parviez R. Hosseini, Felicia Keesing, Annapaola Rizzoli, Gerardo Suzán, Marco Vignuzzi, Marion Vittecoq, James N. Mills, Jean-François Guégan
Opinion | published 06 Aug 2015 | PLOS Pathogens
10.1371/journal.ppat.1004992

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
(Accessed 22 August 2015)
No new digest content identified.

Pneumonia
Vol 6 (2015)
https://pneumonia.org.au/index.php/pneumonia/issue/current
[Reviewed earlier]

Preventive Medicine
Volume 77, In Progress (August 2015)
http://www.sciencedirect.com/science/journal/00917435/77/supp/C
[No new relevant content identified]

Proceedings of the Royal Society B
07 May 2015; volume 282, issue 1806
http://rspb.royalsocietypublishing.org/content/282/1806?current-issue=y[Reviewed earlier]
[Reviewed earlier]

Public Health Ethics
Volume 8 Issue 2 July 2015
http://phe.oxfordjournals.org/content/current
Special Symposium: Migrant Health
[Reviewed earlier]

Qualitative Health Research
August 2015; 25 (8)
http://qhr.sagepub.com/content/current
Special Issue: Grounded Theories
[Reviewed earlier]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
June 2015 Vol. 37, No. 6
http://www.paho.org/journal/
[Reviewed earlier]

Risk Analysis
July 2015 Volume 35, Issue 7 Pages 1187–1387

http://onlinelibrary.wiley.com/doi/10.1111/risa.2015.35.issue-7/issuetoc
[Reviewed earlier]

Science
21 August 2015 vol 349, issue 6250, pages 761-896
http://www.sciencemag.org/current.dtl
Perspective - Medicine
Global control of hepatitis C virus
Andrea L. Cox
Author Affiliations
Johns Hopkins University, Baltimore, MD, USA.
Summary
Hepatitis C virus (HCV) infection is a blood-borne disease that infects ~185 million people (~3% of the world's population) worldwide (1). It can result in severe liver disease and is the leading cause of liver cancer in many countries. Although directly acting antivirals (DAAs) that target the viral life cycle have created enormous optimism about controlling HCV infection, achieving that goal remains a substantial challenge. Both acute and chronic infections are largely asymptomatic, infection incidence is rising in the United States (2), and comprehensive screening programs are rare in the most highly endemic regions of the world. As a result, less than 5% of the world's HCV-infected population, and only 50% of the United States' HCV-infected population, are aware that they are infected (3, 4) (see the figure). Most of these individuals will not receive treatment and will remain at risk for transmitting the infection to others. Successful control of HCV infection will most likely require a combination of mass global screening to identify those with infection, treatment, and prevention. Prophylactic HCV vaccination would also go a long way to reducing harm for uninfected people who are at risk.

14 August 2015 vol 349, issue 6249, pages 665-760
http://www.sciencemag.org/content/349/6249.toc
Vaccines
Ebola virus vaccines—preparing for the unexpected
Hans-Dieter Klenk and Stephan Becker
Science 14 August 2015: 693-694.
Many lives might have been saved if clinical studies of Ebola virus vaccines had been done earlier [Also see Report by Marzi et al.]
Summary
The still ongoing Ebola outbreak in West Africa, which began in 2013, and with more than 27,000 cases and 11,000 deaths so far, highlights the need for a vaccine against the disease (1). Hopes to have a vaccine have been nourished in recent years by studies with recombinant vesicular stomatitis virus (VSV) expressing the Ebola virus glycoprotein (VSV-EBOV). VSV-EBOV efficiently protects rodents and nonhuman primates against EBOV from viral strains (Kikwit strain in 1995, for example) that caused past outbreaks, but it was not known if it is also efficacious against the Makona strain responsible for the West African outbreak. On page 739 of this issue, Marzi et al. (2) demonstrate that the recombinant vaccine provides protective immunity in macaques against the Makona strain. Complete protection was achieved within 7 days after vaccination, suggesting that the vaccine will provide an ideal countermeasure for protecting health care workers and other persons at risk in an outbreak situation.

Research Articles

Diversion of HIV-1 vaccine–induced immunity by gp41-microbiota cross-reactive antibodies

Wilton B. Williams, Hua-Xin Liao, M. Anthony Moody, Thomas B. Kepler, S. Munir Alam, Feng Gao, Kevin Wiehe, Ashley M. Trama, Kathryn Jones, Ruijun Zhang, Hongshuo Song, Dawn J. Marshall, John F. Whitesides, Kaitlin Sawatzki, Axin Hua, Pinghuang Liu, Matthew Z. Tay, Xiaoying Shen, Andrew Foulger, Krissey E. Lloyd, Robert Parks, Justin Pollara, Guido Ferrari, Jae-Sung Yu, Nathan Vandergrift, David C. Montefiori, Magdalena E. Sobieszczyk, Scott Hammer, Shelly Karuna, Peter Gilbert, Doug Grove, Nicole Grunenberg, M. Juliana McElrath, John R. Mascola, Richard A. Koup, Lawrence Corey, Gary J. Nabel, Cecilia Morgan, Gavin Churchyard, Janine Maenza, Michael Keefer, Barney S. Graham, Lindsey R. Baden, Georgia D. Tomaras, and Barton F. Haynes

Science 14 August 2015: aab1253
Published online 30 July 2015 [DOI:10.1126/science.aab1253]

The antibody response to an HIV-1 vaccine is dominated by preexisting immunity to microbiota.

Abstract

Report

VSV-EBOV rapidly protects macaques against infection with the 2014/15 Ebola virus outbreak strain

Andrea Marzi1, Shelly J. Robertson1, Elaine Haddock1, Friederike Feldmann2, Patrick W. Hanley2, Dana P. Scott2, James E. Strong3, Gary Kobinger3, Sonja M. Best1, Heinz Feldmann1,*

Author Affiliations

1Laboratory of Virology, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Hamilton, MT 59840, USA.
2Rocky Mountain Veterinary Branch, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Hamilton, MT 59840, USA.
3Special Pathogens Program, National Microbiology Laboratory, Public Health Agency of Canada, Winnipeg, Manitoba, Canada.

Abstract

The latest Ebola virus (EBOV) epidemic spread rapidly through Guinea, Sierra Leone, and Liberia, creating a global public health crisis and accelerating the assessment of experimental therapeutics and vaccines in clinical trials. One of those vaccines is based on recombinant vesicular stomatitis virus expressing the EBOV glycoprotein (VSV-EBOV), a live-attenuated vector with marked preclinical efficacy. Here, we provide the preclinical proof that VSV-EBOV completely protects macaques against lethal challenge with the West African EBOV-Makona strain. Complete and partial protection was achieved with a single dose given as late as 7 and 3 days before challenge, respectively. This indicates that VSV-EBOV may protect humans against EBOV infections in West Africa with relatively short time to immunity, promoting its use for immediate public health responses.

7 August 2015 vol 349, issue 6248, pages 557-664
http://www.sciencemag.org/content/349/6248.toc
[No new relevant content identified]

Social Science & Medicine

Volume 138, In Progress (August 2015)
http://www.sciencedirect.com/science/journal/02779536/138
[Reviewed earlier]

Tropical Medicine and Health
Vol. 43(2015) No. 2
https://www.jstage.jst.go.jp/browse/tmh/43/0/_contents
[Reviewed earlier]

Tropical Medicine & International Health
July 2015 Volume 20, Issue 7 Pages 821–966
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2015.20.issue-7/issuetoc
[Reviewed earlier]

Vaccine
Volume 33, Issue 34, Pages 4155-4218 (14 August 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/34

WHO Recommendations Regarding Vaccine Hesitancy
Edited by Melanie Schuster and Philippe Duclos
Editorial
Vaccine Special Issue on Vaccine Hesitancy
Benjamin Hickler, Sherine Guirguis, Rafael Obregon
doi:10.1016/j.vaccine.2015.04.034
Open Access
For most readers of "Vaccine," it is a truism that vaccines represent one of the safest and most effective tools available in global efforts to control and prevent infectious diseases. Yet, parents searching the Internet about whether or not it is safe to get themselves or their children vaccinated will find this consensus recast as a controversy, or even a conspiracy. Many of the top internet search results question or dispute the scientific consensus about the safety and effectiveness of some or all vaccines on a number of grounds, from secular to religious to political-philosophical. The gap between expert consensus and the thinking among many publics around the world is not limited to the Internet. The proliferation of conflicting information and the ease with which misinformation can amplify — via old and new media channels — provide a confusing context for parents seeking additional guidance from health workers, religious leaders, family members, or other trusted sources, many of whom may themselves be misinformed about the risks and benefits of vaccines. In this context, perhaps it is not surprising that some caregivers have become "hesitant" about decisions to vaccinate.

Drawing on examples from around the world, in richer and poorer countries alike, the papers in this Special Issue demonstrate that there is no single form that vaccine hesitancy takes, and that the reasons behind decisions to delay or refuse vaccination are highly variable and context specific. Skepticism and rejection of vaccines among a portion of the public is as old as vaccine technology itself. But there are reasons to believe that new dynamics in the early 21st century have made the question of how to address vaccine hesitancy more acute, including the

accelerated introduction of additional vaccines into routine programs, high-profile global initiatives to bring the benefits of immunization to the one-in-five children in developing countries who currently do not receive those benefits, and tectonic shifts in the production and consumption of information associated with the emergence and global penetration of social media. These dynamics set the backdrop for the request by the Strategic Advisory Group of Experts (SAGE) on Immunization to establish a working group on vaccine hesitancy. As vaccine hesitancy trends persist and associated risks have arguably increased in recent years, this supplement represents a timely contribution to the state of knowledge regarding "vaccine hesitancy" halfway into the Decade of Vaccines (2011–2020).

The introductory article in this Special Issue summarizes the history and rationale for SAGE's initial request to establish a Working Group on Vaccine Hesitancy in March 2012. It notes that reports about declining public trust and acceptance of vaccines and/or immunization programs in some settings are longstanding issues. Since 2001, SAGE has repeatedly acknowledged the need to address the gap between public perceptions of vaccines and the consensus of the scientific and public health communities. By 2008–2009, SAGE reports explicitly recognized the need to actively pursue more methodical and proactive strategies to address misinformation propagated by increasingly vocal and sophisticated anti-vaccine movements, particularly in Europe. By the beginning of the Decade of Vaccines, experiences from polio eradication programs in India and Nigeria made it clear that vaccine hesitancy, public mistrust of vaccines and immunization services, and outright rejection of vaccines, are global issues that threaten to undermine decades of progress, the achievement of Millennium Development Goals, and the objectives of the Global Vaccine Action Plan (2011–2020).

Led by a joint WHO and UNICEF Secretariat, the SAGE Vaccine Hesitancy Working Group issued its final report to SAGE in October 2014. SAGE endorsed the proposed definition of vaccine hesitancy as "[a] delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific, varying across time, place and vaccines [and] includes factors such as complacency, convenience and confidence." This Special Issue includes many of the products, conclusions, and recommendations endorsed by SAGE based on the Working Group's progress, including:
[1] the definition of vaccine hesitancy and delineation of its components and potential determinants;
[2] an account of attempts to develop and pilot indicators to measure the scale and character of hesitancy in order to inform the development of strategies and policies and measure the effectiveness of interventions;
[3] suggested steps for adapting the Guide to Tailoring Immunization Programmes (WHO EURO) into a more widely applicable diagnostic resource for generating behavioral insights and identifying the determinants of vaccine hesitancy among specific subgroups in particular contexts anywhere in the world;
[4] an examination of social and commercial marketing applications with consideration of their potential to contribute to interventions to address vaccine hesitancy;
[5] systematic reviews of past strategies to address vaccine hesitancy; and
[6] a brief synopsis of four lessons from the field of health communication that are applicable to efforts to address vaccine hesitancy.

Taken collectively, these papers provide a sense of the current state of understanding regarding vaccine hesitancy as well as a set of high-level recommendations for next steps. They highlight

the need to continue to refine our understanding of vaccine hesitancy, including the many forms it can take, the implications it may have in different contexts, its proximal and distal causes, and the changing nature of both the challenge and potential solutions in light of emerging technologies, a rapidly evolving global media environment, and an ever-changing geopolitical terrain. SAGE highlights the urgent need to develop institutional structures and organizational capacity at local, national and global levels to proactively address vaccine hesitancy and prepare for timely response in the event of rumors, media misinformation, adverse events following immunization (AEFI), or organized anti-vaccine movements. They also highlight the need to couple strategies to tackle vaccine hesitancy with efforts to tailor service delivery to match local needs and cultural practices. This issue of Vaccine represents a preliminary step towards critically needed initiatives to systematically share experiences between organizations and contexts, document and build on what works, and develop, validate, implement, and disseminate new tools and resources to deal with a problem that shows no sign of abating.

Looking across the articles and reflecting on lessons learned from other public education initiatives to engage resistant communities in productive dialogue or to counter misinformation about critical public health and development issues (e.g. polio eradication, tobacco, HIV), a number of additional themes and recommendations emerge that deserve highlighting. For example, it becomes clear that reaching out to and involving a broader range of stakeholders needs to take place earlier in processes of decision-making and communicating about the organization and delivery of immunization services or activities like the introduction of new vaccines or the extension of immunization services to non-traditional populations (e.g. adolescents). Too often, this sort of outreach is only done in reaction to a problem that has finally grown too big to ignore. To riff on an immunization key message: prevention is better—and cheaper—than treatment. WHO and UNICEF will continue to work with our national counterparts to be proactive about this outreach, inclusive and open-minded about who should be counted as a stakeholder, and make sure all parties are supported in their efforts to sustain the channels of dialogue and sense of mutual ownership we are collectively working to establish.

The time has come to act on—and invest in—the SAGE recommendation that key immunization partners align their efforts to develop local, national, and global capacities in fields outside of the traditional remit of immunization programs, including medical anthropology, social and behavior change communication, opinion research, behavioral economics, commercial and social marketing, and user-centered design research. It is not an effective formula to have vaccine hesitancy be addressed by one organization or department, whilst plans and activities to introduce new vaccines, enhance coverage, or reduce inequities in uptake are undertaken in isolation by another. A clear lesson from the examples in this Special Issue is that immunization programs must systematically and comprehensively address not only supply-side but also demand-side strategies, and do so from inception through implementation.

As the recent Ebola crisis tragically brought to light, engaging with communities and persuading individuals to change their habits and behaviors is a lynchpin of public health success. Addressing vaccine hesitancy is no different. Proactive preparation and nimble response based on social and behavioral insights requires analytical capacity to detect, assess, and address "hotspot" areas of hesitancy that can quickly become explosive; ongoing engagement with social actors (i.e. media; opinion leaders) that shape public perceptions of risk and safety of

vaccines; and predefined roles, prepositioned resources, and crisis mitigation plans that can be triggered to effectively address rumors or misinformation before they adversely affect uptake.

Although this Special Issue focuses on vaccine and vaccination hesitancy, it is important to see the work on hesitancy as only one aspect of a broader agenda of generating public trust in and demand for immunization. One of the six primary strategic objectives in the Global Vaccine Action Plan calls for "individuals and communities to understand the value of vaccines and demand immunization as both their right and responsibility."[1] Achieving this objective requires going beyond addressing vaccine hesitancy issues. But the better we understand the issues described in this Special Issue and the smarter we are about capitalizing on the opportunities that come with the associated SAGE recommendations, the closer we are to tackling the broader agenda of enhancing and sustaining public demand for immunization.
Conflict of interest: None of the authors had any potential conflict of interest.
1 http://www.who.int/immunization/global_vaccine_action_plan/en/ [accessed 02.02.15].

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 22 August 2015)
Article: **Small Wonders—The Use of Nanoparticles for Delivering Antigen**
by Aya Taki and Peter Smooker
Vaccines 2015, 3(3), 638-661; doi:10.3390/vaccines3030638 - published 10 August 2015

Review: **Plant Viruses as Nanoparticle-Based Vaccines and Adjuvants**
by Marie-Ève Lebel, Karine Chartrand, Denis Leclerc and Alain Lamarre
Vaccines 2015, 3(3), 620-637; doi:10.3390/vaccines3030620 - published 5 August 2015

Value in Health
July 2015 Volume 18, Issue 5, p549-738
http://www.valueinhealthjournal.com/current
Cost-Effectiveness Analysis of a Television Campaign to Promote Seasonal Influenza Vaccination Among the Elderly
Minchul Kim, PhD, Byung-Kwang Yoo, MD, PhD
Published Online: July 07, 2015
DOI: http://dx.doi.org/10.1016/j.jval.2015.03.1794
Abstract
Background
The U.S. policy goals regarding influenza vaccination coverage rate among the elderly include the increase in the coverage rate and the elimination of disparities across racial/ethnic groups.
Objective
To examine the potential effectiveness of a television (TV) campaign to increase seasonal influenza vaccination among the elderly.
Methods
We estimated the incremental cost-effectiveness ratio (ICER, defined as incremental cost per additionally vaccinated Medicare individual) of a hypothetical nationwide TV campaign for influenza vaccination compared with no campaign. We measured the effectiveness of the nationwide TV campaign (advertised once a week at prime time for 30 seconds) during a 17-

week influenza vaccination season among four racial/ethnic elderly groups (N=39 million): non-Hispanic white (W), non-Hispanic African American (AA), English-speaking Hispanic (EH), and Spanish-speaking Hispanic (SH).
Results
The hypothetical campaign cost was $5,960,000 (in 2012 US dollars). The estimated campaign effectiveness ranged from −1.1% (the SH group) to 1.42% (the W group), leading to an increased disparity in influenza vaccination among non-Hispanic white and non-Hispanic African American (W-AA) groups (0.6 percentage points), W-EH groups (0.1 percentage points), and W-SH groups (1.5 percentage points). The estimated ICER was $23.54 (95% confidence interval $14.21–$39.37) per additionally vaccinated Medicare elderly in a probabilistic analysis. Race/ethnicity-specific ICERs were lowest among the EH group ($22.27), followed by the W group ($22.47) and the AA group ($30.55). The nationwide TV campaign was concluded to be reasonably cost-effective compared with a benchmark intervention (with ICER $44.39 per vaccinated individual) of a school-located vaccination program. Break-even analyses estimated the maximum acceptable campaign cost to be $14,870,000, which was comparable to the benchmark ICER.
Conclusions
The results could justify public expenditures on the implementation of a future nationwide TV campaign, which should include multilingual campaigns, for promoting seasonal influenza vaccination.

[back to top/Contents]

* * * *

From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary

[back to top/Contents]

* * * *

Media/Policy Watch

Media Watch will resume with the next edition.

[back to top/Contents]

* * * *

Chance Ebola Can Be Defeated by End of 2015, World Health Organization Chief Tells Security Council, Urging Sustained Focus to Prevent Future Outbreaks

UN Security Council
13 August 2015
SC/12006
[Full text]

Ebola could be "soundly defeated" by the end of the year if the intensity of case detection and contact tracing was sustained, the Director-General of the World Health Organization (WHO)

told the Security Council today, outlining reforms to improve the organization's performance and crediting unwavering leadership, especially in Liberia, Guinea and Sierra Leone, for a "night-and-day" difference in the situation from less than a year ago.

Margaret Chan, briefing the Council via video link from Hong Kong, was joined by David Nabarro, Special Envoy of the Secretary-General on Ebola; Tété António, Permanent Observer of the African Union to the United Nations; Per Thöresson (Sweden), on behalf of Olof Skoog, Chair of the Peacebuilding Commission; and Mosoka Fallah, Director of the Community-Based Initiative.

"I can assure you: the progress is real and it has been hard-earned," said Ms. Chan, stressing that surveillance and response capacities had vastly improved. New cases in Liberia had again stopped, while Guinea and Sierra Leone had together reported only three cases during the past two weeks, the lowest numbers in more than a year.

At the same time, she cautioned against a false sense of security, as all it took was one undetected case in a health facility, one infected contact fleeing the monitoring system or unsafe burial to ignite a flare-up. Success hinged on "getting to zero and staying at zero". Most agreed that the lack of public health capacities and infrastructures created the greatest vulnerability to Ebola.

With that in mind, the WHO was designing a blueprint for the rapid development of new medical products for a future outbreak, and next month, would evaluate with the United States Centers for Disease Control and Prevention the performance of three rapid point-of-care diagnostic tests. At the WHO, she was overseeing the creation of a global health emergency work force, a fast-acting operational platform, as well as performance benchmarks and the funding needed to make those changes happen. "The world has learned from the Ebola experience," she said.

Speaking from Geneva, Mr. Nabarro said implementation of the United Nations response "went well" when people at risk felt in control of their lives and when community leaders took part in directing the response, defining the support they required and accessing the necessary assistance. In practice, the response had not consistently prioritized community ownership, which was now understood to be an essential ingredient. Going forward, he urged technical, operational and financial solidarity with the affected counties.

Broadly agreeing, Mr. Antonio said the speedy deployment of human resources was critical. It had taken less than four weeks for the African Union's support initiative to be deployed. Flexibility also was important in clearly defining a support strategy, but not dictating terms. Partnership, in particular with the African private sector, was also critical in the spirit of Africa helping Africans. The Union's convening power and political leverage had brought together technical expertise from 18 Member States, non-governmental organizations, Africans in the Diaspora and others.

In that context, Mr. Fallah shared an "historic" lesson from the West Point slum in Liberia, where distrust of the Government ran high and hid the sick. "We realized that, if we were going to win the fight against Ebola, we needed to involve the community." Within two weeks,

there had been a dramatic change, and the project was asked to replicate the experiment in other areas. The idea was to create trust and empower communities.

When the floor was opened for debate, Council members agreed on the need for vigilance and "relentless" work to bring Ebola transmission to zero. The virus would exploit the slightest delay in the collective response. While weak public institutions and health systems required sustained international support, the primary responsibility for the care, safety and health of people rested with the political leadership, many agreed.

"The heaviest burden falls on us," said Sierra Leone's representative, noting that his country would look to others with fully developed systems that could be adapted to local conditions. It also would listen to the lessons learned from its communities: that anything done in their name must fully reflect local cultures and values. Logistical, scientific and diplomatic efforts must be in harmony, and institutional siloes must operate as one. "We are all committed to seeing the back of this disease," he said.

Also speaking today were the representatives of the Russian Federation, United States, Chad, France, Angola, Chile, Jordan, China, United Kingdom, Spain, Lithuania, Venezuela, Malaysia, New Zealand and Nigeria.

The meeting began at 10:05 a.m. and ended at 12:56 p.m.

Briefings

Briefing the Council via video link from Hong Kong, MARGARET CHAN, Director-General of the World Health Organization (WHO), said much had changed since she had briefed on the Ebola outbreak last September. Surveillance and response capacities had vastly improved, meaning that there was a good picture of the chains of transmission and how to break them. Full genome sequencing of viruses could be done within 48 hours of detection, yielding clues for the detective work of tracing origins of each case. New cases in Liberia had again stopped, while Guinea and Sierra Leone had together reported only three cases during the past two weeks, the lowest numbers in over a year.

"I can assure you: the progress is real and it has been hard-earned", she said, crediting the highest levels of Government for such success. At the same time, she cautioned against a false sense of security, as all it took was one undetected case in a health facility, one infected contact fleeing the monitoring system or one unsafe burial to ignite a flare-up. Further setbacks could be expected.

International organizations continued to support national efforts, she said, with several thousand specialists working alongside national staff in villages and towns, as well as in capital cities. If the current intensity of case detection and contact tracing could be sustained, the virus could be "soundly" defeated by the end of the year. "That means getting to zero and staying at zero." Fears that the virus could become permanently established in humans in western Africa had receded.

As to what explained the scale and duration of the Ebola outbreak, she said most agreed that the lack of public health capacities and infrastructures created the highest vulnerability. Strengthening regional arrangements was a good place to start to increase the "surge capacity"

needed for a rapid response. Decentralized international organizations like WHO — with its regional and country offices, and networks of collaborating laboratories — provided strong platforms for coordinated technical support and capacity-building.

Additionally, she said, the African Union and the United States Centers for Disease Control and Prevention were jointly establishing a Communicable Disease Control system to help African nations better prepare for outbreaks. The first step later this year would be the establishment of an African Surveillance and Response unit to help African nations fully participate in the International Health Regulations.

She commended West African countries for dealing bravely and boldly with the outbreak. They had shown how the right kind of health care increased the prospects for survival for those with Ebola, having analysed the health and social needs of some 13,000 survivors and mounted a vaccine clinical trial in Guinea, with "extremely encouraging" results. WHO was creating a blueprint for the rapid development of new medical products for a future outbreak, and next month, would evaluate with the Center for Disease Control and national counterparts the performance of three rapid point-of-care diagnostic tests.

"The world has learned from the Ebola experience," she said, noting that she was personally overseeing reforms at WHO that included the establishment of a global health emergency work force, an operational platform that could quickly shift into high gear, performance benchmarks and the funding needed to make those changes happen.

Speaking via video link from Geneva, DAVID NABARRO, Special Envoy of the Secretary-General on Ebola, said Governments, regional organizations and global leaders had stepped up to the challenge of Ebola "like never before". Governments of affected countries had created ways to engage all stakeholders, while local and national health actors had played an essential role alongside other Government sectors, civil society, private enterprises, scientific institutions and the media.

Regional and subregional organizations had been instrumental in channelling attention and fostering action, he said. The African Union had established its support in September 2014, having deployed more than 850 medical workers and recruited more than 4,000 local volunteers. Its chairperson had mobilized more than $32 million through a private sector fundraising drive last November, and on 20 July, African Union Health Ministers had adopted the Statute for the African Centre for Disease Control and Prevention.

At the global level, world leaders had mounted massive, rapid and coordinated support to help the affected countries, he said, noting that the United Nations Mission for Ebola Emergency Response (UNMEER) had deployed just 10 days after the Secretary-General's call for a stepped up response. The Global Ebola Response Coalition, also established at that time, had become an integrated platform for engaging Governments, non-governmental organizations, academia, philanthropists and the private sector.

Recalling that UNMEER had closed on 31 July, he said WHO had taken on stewardship and coordination of the United Nations response, which, over the last year, had been financed from multiple sources, including the Multi-Partner Trust Fund. Indeed, implementation of the response went well when people whose health was at risk had felt in control of their lives. It

also worked best when community leaders took part in directing the response: when people defined the support they required and were able to access the necessary assistance. In practice, the response had not consistently prioritized community ownership. It was clear that that was always an essential ingredient.

Going forward, he said there was a need for technical, operational and financial solidarity with the affected counties, as they could not afford to let up on the response. Ebola survivors also needed support, often in accessing health care and rebuilding their lives. An all-of-society response was needed that included different actors, from local leaders to mining companies. Countries also needed help in complying with the International Health Regulations, which required predictable funding for health systems. Human security depended on being able to anticipate outbreaks and quickly react. "Ring-fenced" support for strong basic health systems and community resilience also were needed, along with capacities for surveillance, analysis, early warning and rapid response.

TÉTE ANTÓNIO, Permanent Observer of the African Union to the United Nations, recalled that the African Union Peace and Security Council had established the African Union Support for Ebola in West Africa (ASEOWA), whose mandate would end on 31 December; the epidemic was deemed contained and under control. Sharing key lessons learned, he said that, first, a speedy response and the deployment of the urgently needed human resources for health was critical. It had taken less than four weeks for the Union's support initiative to be deployed. Second, flexibility was needed. The endeavour had a clearly defined support strategy, but did not dictate to the affected countries. Third, collaboration was needed with and among various actors. The Union's initiative liaised and collaborated with the United Nations, WHO, the United States Centres for Disease Control, Red Cross and other organizations, as well as with Cubans and Chinese with whom the African Union worked inside Ebola treatment units.

A fourth lesson learned was that partnership, in particular with the African private sector, was also critical, he said. The Africa against Ebola Solidarity Trust remained the single largest financial contributor to the African Union's Ebola response. A fifth lesson was the importance of technology and innovation to that response, he said, noting that innovative software had been used to generate and analyse relevant data. Sixth, the Union had learned that African solidarity — the spirit of Africa helping Africans — was an important principle. The Union's convening power, political leverage and continental reach had brought together technical expertise from 18 Member States, African Humanitarian Action, non-governmental organizations, the Economic Community of West African States (ECOWAS), Africans in the Diaspora, as well as from affected countries.

A seventh lesson learned was the need for the African Union to put in place a medium- to long-term programme to build Africa's capacity to deal with public health emergencies and threats in the future. Disease surveillance, detection, emergency preparedness for health and natural disasters and response were vital. The capacities and systems most needed must be reinforced. It was in that context that the Union had reiterated its commitment to speed up the establishment of the Africa Centre for Disease Control and Prevention. An eighth lesson was the need for a cost-effective mission, and a ninth was the importance of bridging the gap between Geneva and New York in the event of public health emergencies of international concern. With no role as yet for the Security Council in International Health Regulations, he

invited its members, with the impending review of the regulations, to consider how best to address that gap.

PER THÖRESSON (Sweden), Chair of the Peacebuilding Commission, said international attention and support for the Ebola outbreak must now be matched by equal levels of commitment for the long-run recovery. Donors having pledged at the Ebola Recovery Conference on 10 July must deliver on their commitments, he said in that regard, adding that "only by staying the course will we ensure that this does not happen again, and that progress made on peacebuilding is sustained". The crisis had exposed gaps in international peacebuilding efforts during the last decade, in terms of institution-building, security sector reform, reconciliation and economic recovery. There was also a need to emphasize regional approaches, he said, commending, in that regard, the role that the Mano River Union was continuing to play.

Moving forward, he said, there was a need to strengthen State-society relations, including institution-building. The successful national and local community leadership in the Ebola response should be built upon for the recovery phase. Strengthening national and local institutional capacity should be the focus, including as a way to improve State-society relations. Another significant issue was the provision of basic social services throughout the affected countries. Decentralization of public services was key to extending State authority and ensuring that citizens had a stake in their country's governance. That also contributed to restoring trust between citizens and the State. Better access to health care in affected countries would help to achieve resilience.

Socioeconomic recovery in the aftermath of the Ebola crisis should be a top priority, he said, adding that generating employment and providing access to education, in particular for youth and women, would be critical. Diversification of the economy would help to ensure more inclusive growth, as well as to reduce the dependency on the extractive sector. Responsible investments, improved business environments and financial inclusion were also key levers, which could propel development. He also stressed the importance of better investing in preventive action. "We must move beyond a fire brigade mode of doing business and build back more resilient institutions and stronger national systems in the Ebola recovery process," he said.

MOSOKA FALLAH, Director of the Community Based Initiative Project, said that, in August 2014, Ebola had struck the West Point slum in Liberia. Some 70,000 people were crowded into 5,000 houses with no sanitation, he said, adding that the slum's residents distrusted Government institutions and hid the sick. It was a daunting and impossible task. From there, however, a historic experiment had arisen: "We realized that, if we were going to win the fight against Ebola, we needed to involve the community." Within two weeks, there had been a dramatic change, and the Project was asked to replicate the experiment in other communities. "We started to hunt Ebola one community at a time," he said. The story was one of community members, including elders and young people, who led the charge. There was word of another outbreak in June, he noted, adding that his team had formed an Ebola Council, taken pictures of survivors and brought them back to the community. There were important lessons learned, in particular, the power of the community to overcome challenges and to survive. If communities were supported with routine health services today, they would be better prepared for emergencies tomorrow. The idea was based on trust and community empowerment.

Statements

SERGEY KONONUCHENKO (Russian Federation) said the Secretary-General's decision to withdraw UNMEER, pointed to the progress made. The situation in the affected countries required the international community to take steps to prevent the virus's spread. A key coordinating role would be played by the WHO. The Russian Federation had contributed to international efforts through bilateral assistance to West African States, strengthening international response mechanisms and enhancing national readiness to prevent the cross-border spread of the virus. The Russian Federation also had provided $20 million to the WHO, the United Nations Children's Fund (UNICEF), World Bank and the Ebola Trust Fund, among others, with its overall contribution exceeding $60 million. It also had transferred to Guinea a field hospital and would continue its assistance to ensure Ebola's permanent eradication.

SAMANTHA POWER (United States) said that, while only three new Ebola cases had been reported in the affected countries in the week ending 9 August, it would be a mistake to take attention off the outbreak. Relentless work was needed to get to zero, as Ebola would exploit the slightest delay in the collective response. While procedures could feel onerous, they were critically important to stemming new outbreaks. Public health and primary care systems in affected and vulnerable countries must be enhanced, which meant strengthening institutions and supporting the people who made them work. Last month's International Ebola recovery meeting was aimed at that. Now, countries must deliver on their pledges. In undertaking reforms, she urged understanding of how the global response architecture had allowed the epidemic to spread so wide. Actionable recommendations were needed to ensure coordinated responses. Those efforts should seek to answer why it had taken so long for the international community to be seized by the urgency and magnitude of Ebola.

BANTÉ MANGARAL (Chad) said Ebola had not only affected Liberia, Guinea and Sierra Leone, but also Nigeria, Senegal and Mali, as well as countries beyond Africa. The spread had been so rapid that it was considered a threat to international peace and security, he said, recalling the Council's resolution on Ebola in that context. The impacts on key service delivery points, such as hospitals, testified to the seriousness of the disease and the weakness of public health infrastructure. It had taken a long time for aid to be received. Victims had been stigmatized. The Council and African Union had responded to the Secretary-General's call to ensure that the affected countries were not isolated. Noting that Ebola had affected various areas of society and the economy, he said air and shipping restrictions had caused a collapse in some economic sectors and impacted peacebuilding efforts. Despite that, "we saw solidarity" at international and regional levels in response to the epidemic. He urged a focus on children and women in efforts to stamp out the disease.

ALEXIS LAMEK (France) said the various teams of the United Nations and the African Union had played a key role in containing the Ebola epidemic. However, that epidemic was not over. The international community must continue to monitor the situation beyond the zero cases objective. France had raised €220 million to help combat Ebola, supporting Guinea in particular. It had worked on the setting up of Ebola treatment centres and laboratories, as well as on the recovery of the affected countries, mobilizing an additional €150 million for that purpose. The Ebola crisis had highlighted the fragility of the health-care systems in the affected countries. The epidemic had affected socioeconomic development, as well. The international community needed to learn to cope with such significant health challenges, including through

robust response capacities and strong recovery efforts. In that vein, France would host a high-level meeting in Paris on 29 October, focusing on lessons learned in the Ebola response.

ISMAEL ABRAÃO GASPAR MARTINS (Angola) acknowledged the adoption of Council resolution 2177 (2014), which had declared Ebola a threat to international peace and security, and which had helped to galvanize international support for the affected countries. Angola believed the African Union Support for Ebola in West Africa mission was an example of the role of regional organizations in combating significant health crises. In that respect, the delegation also welcomed the impetus to launch the African Centres for Disease Control. From the hundreds of lives lost, Ebola cases had fallen to an encouraging low level. It provided lessons learned for the international community. In particular, collective efforts could be coordinated to combat other contemporary challenges, including terrorism and extremism. Like Ebola, such crises flourished amid weak infrastructure and needed durable solutions, early and timely interventions. Thanks to the commitment of the international community and determined leadership at the subnational, national, regional and global levels, the Ebola epidemic had been successfully contained. Today's meeting was another chance to take stock and remain vigilant against future epidemics.

CARLOS OLGUÍN CIGARROA (Chile) said the recent Ebola outbreak had provided important lessons learned, including the importance of coordination between United Nations agencies, the private sector and regional and subregional organizations. In particular, he commended the decision by various United Nations agencies to restructure protocols to combat epidemics more effectively. Other lessons learned included the importance of ending discrimination against affected individuals and of taking a human rights-focused approach. Resolution 2177 (2014) included the concept that a health crisis could be a threat to international peace and security. In that regard, he highlighted the importance of having in place an adequate process for post-crisis recovery. Ebola had exposed the vulnerabilities of public health systems. Commending the efforts of the WHO and the Peacebuilding Commission, among other actors working on resilience and recovery, he stressed the importance of seeing the task through "to the end".

DINA KAWAR (Jordan) said the Council's unity, along with coordinated regional and international efforts, had led to UNMEER's establishment. "We have to capitalize on the international accomplishments," she said, recalling the risk of Ebola's resurgence and urging support for affected countries. Weakness in West African public health systems had hindered efforts to eradicate Ebola. Those Governments must improve their health systems, as the virus had quickly spread in part because of those weaknesses. Monitoring and surveillance, and early detection systems, were also required. West African countries should benefit from personnel who had been trained during the Ebola crisis. Indeed, the international community could not ignore the socioeconomic impacts of Ebola. It must continue to support the affected countries by providing resources and assistance.

LIU JIEYI (China) urged a focus on post-Ebola recovery and reconstruction citing the importance of alleviating poverty, which would lay the foundation for preventing a recurrence. He urged an increase in development assistance, job creation, improved national governance and enhancement of countries' capacity to ensure health. A long-term vision was needed. The international community should help African countries build hospitals and laboratories, purchase advanced equipment and support them in establishing emergency response systems. United Nations bodies, such as the WHO, should continue to support the African Union, ECOWAS and

the Mano River Union in preventing and controlling the epidemic. China had been among the first to provide assistance to affected countries, having dispatched chartered planes for delivering goods. Going forward, it would contribute $5 million to the Trust Fund.

PETER WILSON (United Kingdom) said that, while Ebola had been brought under control, curbing its spread had required hard work and sacrifice by Governments and health workers alike. The United Kingdom had committed $660 million in Sierra Leone, having built three diagnostic laboratories there and deployed more than 1,300 military and health workers. "We responded with pace, ambition and innovation," he said, as had other countries. The global community must remain committed to "getting to zero", and even then, "we cannot drop our guard". As affected countries transitioned from crisis to recovery, they required help in restoring basic health services and economic activities. Donors must coordinate their activities. The United Kingdom had pledged $370 million in support of Sierra Leone's recovery strategy. WHO must carry out reforms in order to provide leadership, with more attention given to prevention, so national health systems had early warning triggers to respond to outbreaks and to create more rapid response mechanisms.

FRANCISCO JAVIER GASSO MATOSES (Spain) said the views of those working on the ground were critical to strengthening local, national and regional responses to health crises in the future. Spain also supported the plans for the recovery of the affected countries. The world was close to the end of the Ebola crisis, but still had not reached it, he said, adding "we should not let down our guard". Preparation for similar future emergencies should focus on efforts in the area of research, he said, citing the current development of an Ebola vaccine. There was a need for rapid response resources on the ground, ready to be deployed. Efforts also should focus on rebuilding and improving health-care systems of the affected countries, as well as those that could be affected by such an epidemic in the future. Spain had co-sponsored resolution 2177 (2014) in line with its belief that health crises could threaten international peace and security and lead to backsliding in progress towards stabilization of countries. The Council should further examine how to better incorporate lessons learned into the work of the Peacebuilding Commission.

DOVYDAS ŠPOKAUSKAS (Lithuania) said that the epidemic had again proved that prevention and early action were key in making future cries less devastating and costly. He highlighted the importance of rapid initial response by Governments and the vital role of grass-roots and community organizations in reducing transmission rates. Timely involvement of regional and subregional organizations also was instrumental. The United Nations system had demonstrated its ability to mobilize an immediate, effective and coordinated contribution in combating the outbreak. The crisis disrupted peacebuilding efforts, economies, trade, tourism, basic health care, social services, food security and education in the hardest-hit three West African countries. The burden of the epidemic was particularly harsh on women because of their role as caregivers, as well as on health personnel and providers for their families. It had multifaceted negative impacts on children, with 70,000 birth registrations disrupted and 30,000 orphaned. To strengthen the affected countries' resilience, those vulnerable groups must have a say in their future. "The [United Nations] system and the international community must continue to be vigilant and support Ebola recovery long after the crisis is no longer the front-page news," he said.

MARÍA GABRIELA CHÁVEZ COLMENARES (Venezuela) said the issue of Ebola should be pursued, not only in the Security Council, but also in the General Assembly and the Economic and Social Council, given the irrefutable economic impact of the epidemic. Congratulating the people and Governments of the affected countries for the success they had achieved so far, she said the global mobilization against Ebola could be seen in that success. Some 450 Cuban doctors had gone to West Africa to assist in combating the disease, representing the Latin America and Caribbean region. Post-crisis recovery now needed to be at the top of the international agenda, given the shrinking economies of affected countries. In that vein, the current capitalist model prevailing around the world was the cause of the economic problems in those and other developing countries. Indeed, the Ebola crisis should "give us pause" to rethink sustainable development models, bearing in mind the right of African countries to self-determination and to the full ownership of their development processes. Finally, she said, access to new anti-Ebola initiatives — including the new Ebola vaccine — should be available to all, and not out of reach because of cost. The stigmatization of individuals, peoples and nations should be avoided in order to ensure an ethical and humane response to the pandemic.

RAMLAN BIN IBRAHIM (Malaysia) drew attention to several lessons learned. The epidemic had presented a unique opportunity for the international community to reassess its approach to assisting post-conflict countries. Indeed, there was a need to place more emphasis on building resilience in such countries. Better coordination within the United Nations system was critical, with the aim of generating more political and financial commitments to the Ebola response and recovery effort. Three key priorities underlay that response: inclusivity, institution-building and mutual accountability. Commending the strong engagement of regional and subregional organizations, he also welcomed the role of the Peacebuilding Commission, now equally important in the recovery process. It was vital to ensure the unwavering support of the international community to the affected countries in order to help them emerge from the crisis stronger and more resilient.

GERARD VAN BOHEMEN (New Zealand), stressing the importance of learning from the successes and mistakes of the Ebola emergency mission experience, stated that the international community should be prepared to ensure rapid and focused reactions to future health threats. The speed at which the United Nations Trust Fund was mobilized should be a benchmark for the establishment of funds for urgent action in the future. The rapid nature of the Ebola outbreak had caused widespread fear, but that should not drive States to impose unhelpful and counterproductive restrictions on movement during pandemics. The logistical burden of mounting a large international response quickly could be heavy, for which close coordination between responding countries was vital. While progress in developing vaccines was very encouraging, "the next health crisis could from a yet unidentified threat".

U. JOY OGWU (Nigeria), whose country holds the Council's presidency for August, said in her national capacity that Ebola was a global health threat "of almost unprecedented proportions". It had revealed weakness in health sectors and strained Government revenues. Nigeria could share lessons from its experience in the fight, which included high vigilance, the rapid introduction of control measures, strong Government and community commitment, and quick WHO intervention. Nigeria also had carried out a robust public awareness campaign and avoided dissemination of false information. The Council's adoption of resolution 2177 (2014) had strengthened collective action. She urged preventive and early response mechanisms focused on strengthening health delivery systems, noting that Nigeria had contributed

$3.5 million to the ECOWAS Solidarity Fund. Indeed, Africa must take the lead in addressing its own challenges. Strong support for regional approaches was needed to combat regional pandemics, as they engendered a sense of inclusiveness and were more likely to gain trust of local populations.

VANDI CHIDI MINAH (Sierra Leone) said his country had turned a corner, having moved from a sense of pervasive fear to one of hope. It was determined not look back in anger, but rather, to learn hard lessons and develop best practices. He had come today in remembrance of those who had paid the ultimate sacrifice: doctors, health workers and the many innocents struck down by the disease. Primary responsibility for the care, safety and health of people rested with the political leadership. "The heaviest burden falls on us," he said, noting also that his country needed international support to strengthen its health systems.

Indeed, those systems must be rebuilt better, he said. In such work, Sierra Leone would look to countries with fully developed systems that could be adapted to local conditions. It also would listen to the lessons learned from its communities: that anything done in their name must fully reflect local cultures and values. His Government was mindful that logistical, scientific, diplomatic and other efforts must be in harmony, that there could be no duplication and that institutional siloes must operate as one. Within the subregion, if one State was affected, all were affected. "We stand together and we hope we will succeed together," he said. Sierra Leone looked to Nigeria and Uganda to learn lessons of early warning.

He said he spoke today as a national of an exhausted, but grateful nation, mindful of its responsibilities and failings, and realizing that "we must do better by our populations without hesitation". He thanked the many non-governmental organizations in the field at the outset. From the national leadership and response teams alike, there was a sense that medical protocols must be followed, and within communities, that the Governments now worked for them. "We are all committed to seeing the back of this disease," he said, pledging that Sierra Leone's health ministry aspired to a health system of "reasonable" competence.

* * * *

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

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

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.