Center for Vaccine Ethics and Policy
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Vaccines and Global Health: The Week in Review
11 April 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 6,500 entries.*

Comments and suggestions should be directed to
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***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.*

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EBOLA/EVD [to 11 April 2015]
Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

WHO: Ebola Situation Report - 8 April 2015
[Excerpts]
SUMMARY
:: **A total of 30 confirmed cases of Ebola virus disease (EVD) were reported in the week to 5 April. This is the lowest weekly total since the third week of May 2014.** Case incidence in Guinea decreased to 21, compared with 57 confirmed cases the previous week. Liberia reported no confirmed cases. Sierra Leone reported a fifth consecutive weekly decrease from 25 confirmed cases in the week to 29 March to 9 in the week to 5 April…
:: …In the context of falling case incidence and a receding zone of transmission, treatment capacity exceeds demand in Liberia and Sierra Leone. Accordingly, and with technical guidance

from WHO, national authorities in both countries have begun to implement plans for the phased safe decommissioning of surplus facilities. Each country will retain a core capacity of high-quality Ebola treatment centres, strategically located to ensure complete geographic coverage, with additional rapid-response capacity held in reserve…
:: …There were no new health worker infections in the week to 5 April, with the cumulative total remaining at 861 since the start of the outbreak. In accordance with the 45-day reinforcement of emergency measures declared in western Guinea, several private clinics have been closed after EVD cases were treated on the premises.

COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION
:: **There have been a total of 25,515 reported confirmed, probable, and suspected cases of EVD in Guinea, Liberia and Sierra Leone (figure 1, table 1), with over 10,000 reported deaths (outcomes for many cases are unknown)**…

WHO Director-General declares that the Ebola outbreak in Guinea, Liberia and Sierra Leone continues to constitute a Public Health Emergency of International Concern
WHO statement: 5th meeting of the IHR Emergency Committee regarding the Ebola outbreak in West Africa
10 April 2015
The fifth meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (IHR) 2005 regarding the Ebola virus disease (EVD, or "Ebola") outbreak in West Africa was conducted with members and advisors of the Emergency Committee on Thursday, 9 April 2015…

…The Committee reviewed developments since the previous meeting on 20 January 2015, including the current epidemiological situation. The Committee noted that as a result of further improvements in EVD prevention and control activities across West Africa, including in the area of contact tracing, the overall risk of international spread appears to have further reduced since January with a decline in case incidence and geographic distribution in Liberia, Sierra Leone and Guinea. These three IHR States Parties provided updates and assessment of the Ebola outbreak, in terms of the epidemiological situation and the status and performance of exit screening and contact tracing.

The Committee recognized the progress achieved by all three countries and emphasized that there was no place for complacency, the primary goal remaining the interruption of transmission as rapidly as possible. The Committee reinforced the importance of community engagement in "getting to zero". The Committee expressed its continued concern about the recent infection of health care workers and reaffirmed the importance of ensuring the rigorous application of appropriate infection prevention and control measures.

The Committee discussed the issue of probable sexual transmission of EVD, particularly the recent case who is likely to have been infected following sexual contact involving an Ebola survivor some months after his recovery. The Committee welcomed the ongoing programme of research underway in this area and urged its acceleration as a priority.

The Committee discussed the issue of inappropriate health measures that go beyond those in the temporary recommendations issued to date. The Committee was very concerned that

additional health measures, such as quarantine of returning travellers, refusal of entry, cancellation of flights and border closures significantly interfere with international travel and transport and negatively impact both the response and recovery efforts. Although some countries are reported to have recently rescinded these additional health measures, and some regional airlines have resumed flights to affected countries, about 40 countries are still implementing additional measures and a number of airlines have not resumed flights to these countries.

The Committee concluded that the event continues to constitute a Public Health Emergency of International Concern and recommended that all previous temporary recommendations should be extended. The Committee provided the following additional advice to the Director-General for her consideration in addressing the Ebola outbreak in accordance with the IHR.

Recommendations for the most affected countries (Guinea, Liberia, Sierra Leone)
The Committee strongly reiterated the need for continued exit screening in the three affected countries. Such exit screening must be maintained for at least 42 days after the last case has twice tested negative for Ebola; countries are encouraged to maintain exit screening until human-to-human transmission has stopped in the entire subregion. The Committee again urged affected countries to provide WHO, on a monthly basis, with the number of people screened at international airports and the results of such screening.

Recommendations for countries sharing borders with Guinea, Liberia and Sierra Leone
The Committee reemphasized the need to continue to reinforce active surveillance, particularly in border areas, and to engage in cross-border cooperation, information and asset sharing, continued vigilance for new cases, and tracing of known contacts. The Committee highlighted the strong social and cultural linkages that cross national boundaries and must be taken into account in planning and implementing such activities.

Recommendations for all countries
The Committee reaffirmed the need to avoid unnecessary interference with international travel and transport, and to only implement measures which are commensurate with the current public health risks, as specified in Article 2 of the IHR 2005 and expressed in the current temporary recommendations. The Committee welcomed WHO's continued work to monitor inappropriate measures and urged States Parties to reverse quickly any such measures and to inform WHO of such action in advance of the World Health Assembly discussion on the Ebola crisis in May 2015.

Based on this advice and the information considered by the Committee, the Director-General declared that the Ebola outbreak in Guinea, Liberia and Sierra Leone continues to constitute a Public Health Emergency of International Concern.
The Director-General endorsed the Committee's advice, extended the existing Temporary Recommendation and issued the additional advice as new Temporary Recommendations under IHR (2005). The Director-General thanked the Committee members and advisors for their advice and requested their reassessment of this situation within three months or earlier should circumstances require.

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Health Policy

Squabbles Over Testing Methods Hamper Search for Ebola Vaccine

Researchers at odds over most effective way to trial treatments

Wall Street Journal

Thomas M. Burton

Updated April 9, 2015 4:42 p.m. ET

The Ebola virus outbreak in West Africa created a rare opportunity: New vaccines could be tested, and if they worked, serve as a firewall in future epidemics.

It now appears this chance is slipping away amid public health officials' squabbles over the right way to test vaccines. As a consequence, there may never be a definitive answer about the vaccines' effectiveness.

The study generally regarded as the most scientifically solid, which is run by the U.S. National Institutes of Health, began in Liberia but is struggling as new Ebola cases have subsided. The other studies, in Guinea and Sierra Leone, fall short of the scientific gold standard—a randomized, placebo-controlled study—partly because some medical officials have opposed giving a placebo to anyone at risk for the deadly disease. As a result, this outbreak could end without the vaccines' being rigorously tested.

"I don't see how it's going to happen unless our trial gets expanded," said Dr. H. Clifford Lane, deputy director of the NIH's National Institute of Allergy and Infectious Diseases (NIAID), who is helping to lead the trial in Liberia. He said expanding the study to Guinea, or perhaps Sierra Leone, "is the right thing to do."

Just this week, following inquiries by The Wall Street Journal, the World Health Organization said it and the government of Guinea will allow the NIH study to expand there. However, a senior Guinean health official said in an interview that no such decision has been made. Some other doctors in the Guinea trial oppose NIH study expansion into Guinea because it might harm their own research.

Randomized, placebo-controlled trials are overwhelmingly regarded as the best scientific way to evaluate medical products. People are randomly assigned to get the product or a placebo—in this case, a placebo vaccine. Ideally, such a study is "double-blind," meaning that neither patients nor doctors know who gets the real thing.

At NIH, NIAID Director Anthony S. Fauci and Dr. Lane say a placebo-controlled study is both essential and ethical because otherwise no one would know if the vaccines actually are working. Early results of the NIH trial show it is safe, but testing hasn't determined whether the experimental vaccines can actually protect against Ebola.

The NIH research in Liberia was set to enroll about 27,000 health-care workers. They were to be given a vaccine developed by NIH and GlaxoSmithKline PLC, another vaccine from the Public Health Agency of Canada, Merck & Co. and NewLink Genetics Corp., or a placebo.

But Ebola rates have plummeted since last year. The WHO reports that as of the week ended April 5, there were 21 new cases in Guinea, nine in Sierra Leone and none in Liberia.
In Guinea, the WHO is conducting a study along with Doctors Without Borders and other groups. They are using a design called "ring vaccination." When a new Ebola case appears, people in contact with that person get vaccinated with the Merck/NewLink vaccine, establishing a "ring" around that first case. The next test group is formed when a person in, say, another village gets Ebola; people in that person's ring get vaccinated 21 days later. The next ring is vaccinated immediately, the next 21 days later, and so on.

The researchers say the decision about giving an immediate vaccination or waiting 21 days—the end of the estimated incubation period for Ebola—produces a randomized study that could find a difference in the rate of susceptibility to Ebola from ring to ring. But Dr. Lane sees a big flaw: After 21 days, all of the test subjects have received a vaccine, making it difficult to tell differences between those who were inoculated and those who weren't.

Dr. John-Arne Rottingen of the Norwegian Institute of Public Health, a leading figure in the Guinea study, said researchers in Guinea stayed away from using a placebo because they feared "that the outbreak would really continue into an epidemic." He said the Guinean study nevertheless could produce definitive results about the vaccine by late summer, and argues against allowing NIH to expand its research into Guinea. He and others say people in Guinea might not be willing to be in a placebo-controlled study.

"I don't think it's feasible to do the NIH study at the same time as the ring vaccination study," he said, partly because there may not be enough patients for both.

Study participants said they shied away from using a placebo because Guinean doctors didn't want it. Neither did Doctors Without Borders.

"When there is a placebo, one person might get an effective vaccine, and another person might not get the vaccine," said Annick Antierens, the international group's deputy medical director. She said the humanitarian group "is reluctant to be engaged in a randomized, controlled trial in an Ebola context." Still, Dr. Antierens and colleagues say their study is scientifically rigorous.

"The tragedy to me is that the protocol designs are not equivalent," said the NIH's Dr. Lane. The Guinea study, he said, "has the look of a drug distribution system in the guise of research. We don't know that any of this stuff works, and they're pumping it into people."

Mandy Kader Konde, chairman of the Ebola Research Commission in Guinea, said some doctors in his country also have had concerns about giving some patients a placebo. Dr. Konde said it is "under discussion" to possibly allow the NIH to expand its research into Guinea but that, "We have to see a research protocol" first.

In Sierra Leone, the U.S. Centers for Disease Control and Prevention is helping run a study in which about 6,000 health-care workers get vaccinated with the Merck/NewLink vaccine, either right away or up to six months later. But all participants will know if they were vaccinated or not.

The main problems with this method are that vaccinated people could engage in riskier behavior, or that their bosses might order them into riskier situations, biasing the results. Also, those who weren't might be more careful.

"We are aware that there are biases, and possible differences in behavior," said Dr. Anne Schuchat, the CDC official heading its Sierra Leone effort.

"There is no doubt that the quickest, most definitive way to determine whether an Ebola vaccine is truly effective" and not harmful, said the NIH's Dr. Fauci, "is to perform a double-blind, randomized, placebo-controlled trial."

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UNMEER [to 11 April 2015]
https://ebolaresponse.un.org/un-mission-ebola-emergency-response-unmeer

UN Mission Situation Reports
- 10 Apr 2015
- 09 Apr 2015
- 08 Apr 2015
- 07 Apr 2015

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NIH Watch [to 11 April 2015]
http://www.nih.gov/news/health/apr2015/niaid-01.htm
:: **Patient admitted with Ebola virus disease discharged from NIH Clinical Center**
April 9, 2015 — The individual is no longer contagious to the community.

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POLIO [to 11 April 2015]
Public Health Emergency of International Concern (PHEIC)

GPEI Update: Polio this week - *As of 8 April 2015*
Global Polio Eradication Initiative
[Editor's Excerpt and text bolding]
Full report: http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx
:: April 7 marked one year since the onset of paralysis of the most recent case of wild poliovirus in the Middle East.
:: April 12 marks 60 years since Jonas Salk's inactivated polio vaccine (IPV) was launched, enabling children to be protected against polio for the first time. Read more.
:: National Immunization Days are planned in Madagascar on 27 April to 1 May.
[Selected country-level report content]
Pakistan
:: One new WPV1 case was reported in the past week, in Peshawar district of Khyber Pakhtunkhwa. This most recent case had onset of paralysis on 17 March. The total number of WPV1 cases for 2015 is now 21 (and remains 306 for 2014).

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WHO & Regionals [to 11 April 2015]

:: **WHO responds to urgent health needs in Yemen**

April 2015 -- WHO is responding to increasing shortages in medicines and medical supplies in Yemen as a result of the ongoing conflict. Health facilities in affected governorates are reporting critical shortages in trauma and surgical medicines and supplies for the treatment of injured patients, and shortages are also reported in medicines for chronic diseases.

:: **Building a global emergency workforce ready to go**

8 April 2015 -- WHO's new registration system will help build a global roster of foreign medical response teams ready to deploy for emergencies. The Global Foreign Medical Teams Registry sets minimum standards for international health workers and allows teams to clearly outline their services and skills. This new system helped ensure a fast and efficient international response to the cyclone in Vanuatu and help create better coordination between aid providers and recipients.

More on the Global Foreign Medical Teams Registry

:: **Guidance for immunization programmes in the African Region in the context of Ebola**

WHO information note
Publication date: updated 30 March 2015 Number of pages: 3 Languages: English
WHO reference number: WHO/IVB/14.08.rev2

- Guidance for immunization programmes in the African Region in the context of Ebola pdf, 538 KB

Overview

The specific purpose of this document is to assist countries to:

- Maintain and/or restart immunization services.
- Continue to disseminate educational and social mobilization messages and contribute to Ebola surveillance.
- Provide guidance on infection prevention and control during vaccination.

As the situation evolves, this guidance will be revised if necessary.

:: WHO - Strategic Advisory Group of Experts (SAGE) on Immunization

The next SAGE meeting will take place in Geneva from 14 - 16 April 2015.
Draft agenda (as of 8 April 2015)
pdf, 345kb

:: The **Weekly Epidemiological Record (WER) 10 April 2015**, vol. 90, 15 (pp. 149–160) includes:

- Progress towards measles elimination, Philippines, 1998–2014

:: **Global Alert and Response (GAR) – Disease Outbreak News (DONs)**

- 9 April 2015 - Middle East respiratory syndrome coronavirus (MERS-CoV) – Saudi Arabia

:: WHO Regional Offices

WHO African Region AFRO::
:: Dr Moeti: Strong health systems critical in addressing health threats in the African Region
Brazzaville, 8 April 2015 – The World Health Organization (WHO) Regional Director for Africa, Dr Matshidiso Moeti has called on the Diplomatic Corps accredited to the Republic of Congo to advocate with their national governments to strengthen health systems to be able to address the health challenges facing the African Region. She briefed the diplomats about the on-going Ebola epidemic in West Africa, current and emerging health threats in the WHO African Region, progress towards the Millennium Development Goals (MDGs), and the strategic priorities for WHO's work in the Region for 2015-2020…

WHO Region of the Americas PAHO
:: Caesarean sections should only be performed when medically necessary (04/10/2015)
:: Peruvian chef Gastón Acurio joins PAHO/WHO campaign to prevent foodborne diseases (04/07/2015)
:: Unsafe foods cause over 200 illnesses (04/06/2015)

WHO South-East Asia Region SEARO
No new digest content identified.

WHO European Region EURO
No new digest content identified.

WHO Eastern Mediterranean Region EMRO
:: Sudan receives 2 million doses of measles vaccines in response to the outbreak
8 April 2015
:: WHO deplores deaths of health care workers in Yemen
6 April 2015
:: Lack of funding and vaccines challenges measles outbreak response in Sudan
6 April 2015

WHO Western Pacific Region
No new digest content identified.

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CDC/MMWR/ACIP Watch [to 11 April 2015]
http://www.cdc.gov/media/index.html
:: **MMWR Weekly April 10, 2015 / Vol. 64 / No. 13**
- Sustained Decrease in Laboratory Detection of Rotavirus after Implementation of Routine Vaccination — United States, 2000–2014
- Ebola Active Monitoring System for Travelers Returning from West Africa — Georgia, 2014–2015
- Progress Toward Measles Elimination — Philippines, 1998–2014
- Announcements: National Infant Immunization Week — April 18–25, 2015

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IVI Watch [to 11 April 2015]

http://www.ivi.org/web/www/home

PILOT CAMPAIGN IN ETHIOPIA VACCINATES THOUSANDS OF PEOPLE

- International collaboration with partners from Ethiopia and Korea – LG Electronics, International Vaccine Institute, Oromia Regional Health Bureau and the Ethiopian Public Health Institute

- More than 40,000 Ethiopians vaccinated against acute watery diarrhea

- Oral cholera vaccine developed by IVI introduced for the first time in Ethiopia through the country's public health system

- Vaccination completed prior to World Health Day whose theme this year is food safety; highlights the importance of enteric infections caused by ingesting contaminated food

SEOUL, April 7, 2015- More than 40,000 Ethiopian people were vaccinated against acute watery diarrhea (AWD) through a vaccination campaign that introduced a new oral cholera vaccine for the first time in Ethiopia through the country's public health system. The campaign was conducted through an international collaboration that involved the Ethiopian Public Health Institute (EPHI), Oromia Regional Health Bureau, LG Electronics (LG), and the International Vaccine Institute (IVI)….

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Sabin Vaccine Institute Watch [to 11 April 2015]

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

Sabin Foundation Europe Board of Trustees Appoints New Chairman and Trustee

LONDON – April 7, 2015 – Sabin Foundation Europe, the UK partner of the Sabin Vaccine Institute (Sabin), today announced the appointment of Mr. John Cummins, Group Treasurer of the Royal Bank of Scotland, as chairman of Sabin Foundation Europe (SFE), and the election of Rt Hon Baroness Helene Hayman GBE, a member of the UK Parliament's House of Lords, to the SFE Board of Trustees. Mr. Cummins has served on the SFE Board of Trustees since January 2013. Baroness Hayman has served on the Sabin Board of Trustees since July 2011 and will continue to do so as she joins the SFE Board.

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Industry Watch [to 11 April 2015]

:: **Kathrin U. Jansen, Ph.D., to Lead Pfizer's Vaccine Research and Development Unit**

April 06, 2015

Pfizer Inc. announced today that Kathrin U. Jansen, Ph.D., has been appointed Senior Vice President, Vaccine Research & Development, and will be responsible for leading all Pfizer vaccine research...

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UNICEF Watch [to 11 April 2015]

No new digest content identified.

PATH [to 11 April 2015]

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

No new digest content identified

GAVI [to 11 April 2015]
http://www.gavialliance.org/library/news/press-releases/
No new digest content identified.

Global Fund [to 11 April 2015]
http://www.theglobalfund.org/en/mediacenter/newsreleases/
No new digest content identified.

BMGF (Gates Foundation) [to 11 April 2015]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

FDA Watch [to 11 April 2015]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
No new digest content identified.

European Medicines Agency Watch [to 11 April 2015]
http://www.ema.europa.eu/ema/
No new digest content identified.

European Vaccine Initiative Watch [to 11 April 2015]
http://www.euvaccine.eu/news-events
No new digest content identified.

DCVMN / PhRMA / EFPIA / IFPMA / BIO Watch [to 11 April 2015]
No new digest content identified.

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

No new digest content identified.

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 3, 2015
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

American Journal of Infection Control
April 2015 Volume 43, Issue 4, p313-422
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
April 2015 Volume 48, Issue 4, p365-490
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 105, Issue S2 (April 2015)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
April 2015; 92 (4)
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
7 April 2015, Vol. 162. No. 7
http://annals.org/issue.aspx
[New issue; No relevant content]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 11 April 2015)
[No new relevant content]

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content

(Accessed 11 April 2015)
[No new relevant content]

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 11 April 2015)
[No new relevant content]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 11 April 2015)
[No new relevant content]

BMC Public Health
http://www.biomedcentral.com/bmcpublichealth/content
(Accessed 11 April 2015)
[No new relevant content]

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 11 April 2015)
[No new relevant content]

BMJ Open
2015, Volume 5, Issue 4
http://bmjopen.bmj.com/content/current
[Reviewed earlier]

British Medical Journal
11 April 2015(vol 350, issue 8003)
http://www.bmj.com/content/350/8003-1
[No relevant content identified]

Bulletin of the World Health Organization
Volume 93, Number 4, April 2015, 209-284
http://www.who.int/bulletin/volumes/93/4/en/
[Reviewed earlier]

Clinical Infectious Diseases (CID)
Volume 60 Issue 8 April 15, 2015

http://cid.oxfordjournals.org/content/current
[Reviewed earlier]

Clinical Therapeutics
March 2015 Volume 37, Issue 3, p481-686
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Complexity
March/April 2015 Volume 20, Issue 4 Pages C1–C1, 1–80
http://onlinelibrary.wiley.com/doi/10.1002/cplx.v20.4/issuetoc
[Reviewed earlier]

Conflict and Health
[Accessed 11 April 2015]
http://www.conflictandhealth.com/
[No new relevant content]

Contemporary Clinical Trials
Volume 42, In Progress (May 2015)
http://www.sciencedirect.com/science/journal/15517144/42
[Reviewed earlier]

Cost Effectiveness and Resource Allocation
http://www.resource-allocation.com/
(Accessed 11 April 2015)
[No new relevant content]

Current Opinion in Infectious Diseases
April 2015 - Volume 28 - Issue 2 pp: v-v,117-198
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
April 2015 Volume 15, Issue 1 Pages ii–iii, 1–57
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2015.15.issue-1/issuetoc
[Reviewed earlier]

Development in Practice
Volume 25, Issue 2, 2015

http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Emerging Infectious Diseases
Volume 21, Number 4—April 2015
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

Epidemics
Volume 11, In Progress (June 2015)
http://www.sciencedirect.com/science/journal/17554365
[Reviewed earlier]

Epidemiology and Infection
Volume 143 - Issue 06 - April 2015
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
[Reviewed earlier]

The European Journal of Public Health
Volume 25, Issue 2, 01 April 2015
http://eurpub.oxfordjournals.org/content/25/suppl_1
[Reviewed earlier]

Eurosurveillance
Volume 20, Issue 14, 09 April 2015
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
[New issue; No relevant content]

Global Health: Science and Practice (GHSP)
March 2015 | Volume 3 | Issue 1
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Health Governance
http://blogs.shu.edu/ghg/category/complete-issues/spring-autumn-2014/
[Accessed 11 April 2015]
[No new relevant content]

Global Public Health
Volume 10, Issue 4, 2015

http://www.tandfonline.com/toc/rgph20/current#.VPudJy5nBhU
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 11 April 2015]
[No new relevant content]

Health Affairs
April 2015; Volume 34, Issue 4
http://content.healthaffairs.org/content/current
Cost & Quality Of Cancer Care
A New Priority For Low-Income Countries: Fighting Cancer
Joanne Silberner1
Abstract
For decades, infectious diseases were seen as the biggest health threat in the developing world. That's beginning to change.

Health and Human Rights
Volume 16, Issue 2 December 2014
http://www.hhrjournal.org/volume-16-issue-2/
Papers in Press: Special Issue on Health Rights Litigation
[Reviewed earlier]

Health Economics, Policy and Law
Volume 10 - Issue 02 - April 2015
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[Reviewed earlier]

Health Policy and Planning
Volume 30 Issue 3 April 2015
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 11 April 2015]
[No new relevant content]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 11, Issue 3, 2015

http://www.tandfonline.com/toc/khvi20/current#.VSCO9OEw1hU
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 11 April 2015]
[No new relevant content]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 11 April 2015]
Scoping Review
Ebola, the killer virus
Haider Ghazanfar1*, Fizza Orooj1, Muhammad Ahmed Abdullah1 and Ali Ghazanfar2
Author Affiliations
Infectious Diseases of Poverty 2015, 4:15 doi:10.1186/s40249-015-0048-y
Published: 8 April 2015
Abstract
Ebola virus disease (EVD) has mostly affected economically deprived countries as limited resources adversely affect a country's infrastructure and administration. Probing into the factors that led to the widespread outbreak, setting forth plans to counter EVD cases in developing countries, and devising definitive measures to limit the spread of the disease are essential steps that must be immediately taken. In this review we summarize the pathogenesis of EVD and the factors that led to its spread. We also highlight interventions employed by certain countries that have successfully limited the epidemic, and add a few preventive measures after studying the current data. According to the available data, barriers to prevent and control the disease in affected countries include irresolute and disorganized health systems, substandard sanitary conditions, poor personal hygiene practices, and false beliefs and stigma related to EVD. The public health sector along with the respective chief authorities in developing countries must devise strategies, keeping the available resources in mind, to deal with the outbreak before it occurs. As a first step, communities should be educated on EVD's symptoms, history, mode of transmission, and methods of protection, including the importance of personal hygiene practices, via seminars, newspapers, and other social media. A popular opinion leader (POL) giving this information would further help to remove the misconception about the nature of the disease and indirectly improve the quality of life of affected patients and their families.

International Health
Volume 7 Issue 2 March 2015
http://inthealth.oxfordjournals.org/content/current
Special issue: Digital methods in epidemiology
[Reviewed earlier]

International Journal of Epidemiology
Volume 44 Issue 1 February 2015

http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Infectious Diseases
April 2015 Volume 33, p1
http://www.ijidonline.com/current
[Reviewed earlier]

JAMA
April 7, 2015, Vol 313, No. 13
http://jama.jamanetwork.com/issue.aspx
JAMA Patient Page
Measles Vaccination FREE
Jill Jin, MD, MPH

JAMA Pediatrics
April 2015, Vol 169, No. 4
http://archpedi.jamanetwork.com/issue.aspx
Viewpoint | April 2015
Measles, Mandates, and Making Vaccination the Default Option
Douglas J. Opel, MD, MPH1,2; Saad B. Omer, MBBS, MPH, PhD3
Author Affiliations
JAMA Pediatr. 2015;169(4):303-304. doi:10.1001/jamapediatrics.2015.0291
Extract
This Viewpoint discusses vaccination policy and the debate between protecting individual choice and promoting public health in the context of the current measles outbreak.
The tension between individual choice and public health is both long established and enduring. It also appears to be at a breaking point. With Ebola still crisp in our collective consciousness, health care professionals, public health practitioners, and the public have been captivated by a domestic measles outbreak and confounded by the variation on this timeless tension that it embodies: more parents are exercising their choice to refuse or delay vaccination for their child, yet continued widespread acceptance of vaccination is critical to maintain herd immunity and protect the community from diseases that still circulate…
Viewpoint | April 2015
Program Science—A Framework for Improving Global Maternal, Newborn, and Child Health
Maryanne Crockett, MD, MPH, FRCPC, DTM&H1; Lisa Avery, MD, MIH, FRCPC2;
James Blanchard, MD, MPH, PhD3
Author Affiliations
JAMA Pediatr. 2015;169(4):305-306. doi:10.1001/jamapediatrics.2015.9.
Extract
In 2000, leaders from 189 countries set forth Millennium Development Goals, 2 of which focused on significant reductions in child mortality and maternal mortality by 2015. Despite substantial progress toward these goals, many countries are lagging, with increasing disparity among countries with differing resources. There is a strong consensus that much of this

mortality could be prevented through the effective implementation of known evidence-based interventions.[1]- [3] In particular, there is evidence that the greatest effect on mortality occurs when efforts are initially focused on the most vulnerable individuals.[4] Therefore, the main challenges in reducing mortality relate to how best to improve the availability, quality, and use of these critical interventions, especially for those who most need them. Meeting this challenge will require a better understanding of the distribution and configuration of health services, factors that are associated with enhancing and maintaining the quality of services, and the factors that promote and prevent use of these services along the continuum of care.[5] In this regard, academic institutions can and should contribute much more effectively to generate and translate scientific knowledge that will result in better programs to improve maternal, newborn, and child health (MNCH). To fulfill this important academic mission, "science must leave the ivory tower and enter the agora," as Gibbons urged 17 years ago.[6]

Editorial | April 2015

The Know, Do, and Quality Gaps in International Maternal and Child Health Care Interventions

James M. Tielsch, PhD[1]
Author Affiliations

JAMA Pediatr. 2015;169(4):313-314. doi:10.1001/jamapediatrics.2014.3741.

Extract

Tremendous progress has been made in reducing the mortality rates for young children, especially in low- and middle-income countries, with annual deaths down from 12.6 million in 1990 to 6.3 million in 2013.[1] Although it is unlikely that number 4 (reduce child mortality) of the Millennium Development Goals set by the United Nations in 2001[2] will be achieved by the deadline this year, an even more ambitious goal for the elimination of preventable deaths among newborns and children younger than 5 years by 2030 is likely to be set by the United Nations General Assembly in the fall of 2015.[3] Discussions about these laudable goals often center on claims such as, "we know what works, we just need to do it." In fact, estimates of coverage of proven interventions for child survival are significantly lower than needed to maximize the effects, with the most important coverage gaps seen in the areas of family planning, interventions for newborns, and case management of childhood diseases, such as diarrhea, pneumonia, and malaria.[4] This is often referred to as the know-do gap. In this issue, Mohanan et al[5] provide a distressing description of this gap related to the diagnosis and treatment of diarrhea and pneumonia by health care practitioners in Bihar, India.

The Know-Do Gap in Quality of Health Care for Childhood Diarrhea and Pneumonia in Rural India

Manoj Mohanan, PhD; Marcos Vera-Hernández, PhD; Veena Das, PhD; Soledad Giardili, MA; Jeremy D. Goldhaber-Fiebert, PhD; Tracy L. Rabin, MD; Sunil S. Raj, MD; Jeremy I. Schwartz, MD; Aparna Seth, MBA

Includes: Supplemental Content

Editorial: International Maternal and Child Health Care Gaps; James M. Tielsch, PhD

Collaborative Centralized Reminder/Recall Notification to Increase Immunization Rates Among Young Children: A Comparative Effectiveness Trial

Allison Kempe, MD, MPH; Alison W. Saville, MSPH, MSW; L. Miriam Dickinson, PhD; Brenda Beaty, MSPH; Sheri Eisert, PhD; Dennis Gurfinkel, MPH; Sarah Brewer, MPA; Heather Shull, MA; Diana Herrero, MS; Rachel Herlihy, MD, MPH

Includes: Supplemental Content, Author Interview

Editorial: Centralized Collaborative Reminder/Recall; Alexander G. Fiks, MD, MSCE

Abstract

Importance
Reminder/recall notifications used by primary care practices increase the rates of childhood immunizations, but fewer than 20% of primary care practitioners nationally deliver such reminders. A reminder/recall notification conducted centrally by health departments in collaboration with primary care practices may reduce practice burden, reach children without a primary care practitioner, and decrease the cost of reminders/recalls.
Objective
To assess the effectiveness and cost-effectiveness of collaborative centralized (CC) vs practice-based (PB) reminder/recall approaches using the Colorado Immunization Information System (CIIS).
Design, Setting, and Participants We performed a randomized pragmatic trial from September 7, 2012, through March 17, 2013, including 18 235 children aged 19 to 35 months in 15 Colorado counties.
Interventions
In CC counties, children who needed at least 1 immunization were sent as many as 4 reminders/recalls by mail or autodialed telephone calls by the CIIS. Primary care practices in these counties were given the option of endorsing the reminder/recall notification by adding the practice name to the message. In PB counties, primary care practices were invited to web-based reminder/recall training and offered financial support for sending notifications.
Main Outcomes and Measures
Documentation of any new immunization within 6 months constituted the primary outcome; achieving up-to-date (UTD) immunization status was secondary. We assessed the cost and cost-effectiveness of each approach and used a generalized linear mixed-effects model to assess the effect of the intervention on outcomes.
Results
In PB counties, 24 of 308 primary care practices (7.8%) attended reminder/recall training and 2 primary care practices (0.6%) endorsed reminder/recall notifications. Within CC counties, 129 of 229 practices (56.3%) endorsed the reminder/recall letter. Documentation rates for at least 1 immunization were 26.9% for CC vs 21.7% for PB counties ($P < .001$); 12.8% vs 9.3% of patients, respectively, achieved UTD status ($P < .001$). The effect of CC counties on children's UTD status was greater when the reminder/recall notification was endorsed by the primary care practice (19.2% vs 9.8%; $P < .001$). The total cost of the CC reminder/recall was $28 620 or $11.75 per child for any new immunization and $24.72 per child achieving UTD status; the total cost to the 2 practices that conducted PB reminders/recalls was $74.00 per child for any immunization and $124.45 per child achieving UTD status. The modeling resulted in an adjusted odds ratio of 1.31 (95% CI, 1.16-1.48) for any new immunization in CC vs PB counties.
Conclusions and Relevance
A CC reminder/recall notification was more effective and more cost-effective than a PB system, although the effect size was modest. Endorsement by practices may further increase the effectiveness of CC reminder/recall.
Trial Registration
clinicaltrials.gov Identifier: NCT01557621

Journal of Community Health
Volume 40, Issue 2, April 2015
http://link.springer.com/journal/10900/40/2/page/1
[Reviewed earlier]

Journal of Epidemiology & Community Health
April 2015, Volume 69, Issue 4
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 10, Issue 3, 2014
http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8
Tenth Anniversary Forum: The Future of Global Ethics
[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)
January-March 2015 Volume 7 | Issue 1 Page Nos. 1-50
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 26, Number 1, February 2015
http://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.26.1.html
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 17, Issue 2, April 2015
http://link.springer.com/journal/10903/17/2/page/1
Special Focus: Food, Diet, and Nutrition
39 articles covering these themes in different ethic and nationals contexts
[Reviewed earlier]

Journal of Immigrant & Refugee Studies
Volume 13, Issue 1, 2015
http://www.tandfonline.com/toc/wimm20/current#.VQS0KOFnBhW
[Reviewed earlier]

Journal of Infectious Diseases
Volume 211 Issue 8 April 15, 2015
http://jid.oxfordjournals.org/content/current
[Reviewed earlier]

The Journal of Law, Medicine & Ethics
Spring 2015 Volume 43, Issue 1 Pages 6–166
http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-1/issuetoc
[Reviewed earlier]

Journal of Medical Ethics
April 2015, Volume 41, Issue 4
http://jme.bmj.com/content/current
[Reviewed earlier]

Journal of Medical Internet Research
Vol 17, No 3 (2015): March
http://www.jmir.org/2015/3
[Reviewed earlier]

Journal of Medical Microbiology
March 2015; 64 (Pt 3)
http://jmm.sgmjournals.org/content/current
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 4 Issue 1 March 2015
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Pediatrics
April 2015 Volume 166, Issue 4, p783-1100
http://www.jpeds.com/current
[New issue; No revenant content]

Journal of Public Health Policy
Volume 36, Issue 1 (February 2015)
http://www.palgrave-journals.com/jphp/journal/v36/n1/index.html
[Reviewed earlier]

Journal of the Royal Society – Interface
06 May 2015; volume 12, issue 106
http://rsif.royalsocietypublishing.org/content/current
A review of back-calculation techniques and their potential to inform mitigation strategies with application to non-transmissible acute infectious diseases
Joseph R. Egan, Ian M. Hall

J. R. Soc. Interface 2015 12 20150096; DOI: 10.1098/rsif.2015.0096. Published 8 April 2015
Abstract

Back-calculation is a process whereby generally unobservable features of an event leading to a disease outbreak can be inferred either in real-time or shortly after the end of the outbreak. These features might include the time when persons were exposed and the source of the outbreak. Such inferences are important as they can help to guide the targeting of mitigation strategies and to evaluate the potential effectiveness of such strategies. This article reviews the process of back-calculation with a particular emphasis on more recent applications concerning deliberate and naturally occurring aerosolized releases. The techniques can be broadly split into two themes: the simpler temporal models and the more sophisticated spatio-temporal models. The former require input data in the form of cases' symptom onset times, whereas the latter require additional spatial information such as the cases' home and work locations. A key aspect in the back-calculation process is the incubation period distribution, which forms the initial topic for consideration. Links between atmospheric dispersion modelling, within-host dynamics and back-calculation are outlined in detail. An example of how back-calculation can inform mitigation strategies completes the review by providing improved estimates of the duration of antibiotic prophylaxis that would be required in the response to an inhalational anthrax outbreak.

A century of transitions in New York City's measles dynamics

Karsten Hempel, David J. D. Earn

J. R. Soc. Interface 2015 12 20150024; DOI: 10.1098/rsif.2015.0024. Published 1 April 2015

Journal of Virology

April 2015, volume 89, issue 7

http://jvi.asm.org/content/current

[Reviewed earlier]

The Lancet

Apr 11, 2015 Volume 385 Number 9976 p1365-1476

http://www.thelancet.com/journals/lancet/issue/current

Editorial

Achieving respectful care for women and babies

The Lancet

DOI: http://dx.doi.org/10.1016/S0140-6736(15)60701-2

Summary

April 11 is the International Day for Maternal Health and Rights, which aims to encourage rights-based, respectful care of women during pregnancy and childbirth. The day was launched last year by the Center for Health and Gender Equity, and co-sponsored by a consortium of maternal health organisations, including Women Deliver and the International Planned Parenthood Federation. These organisations are calling on governments, international institutions, and the global community to officially recognise the day and promote and support this issue.

Comment

Making sense of health estimates

Irene Agyepong, Tumani Corrah, Yan Guo, Bruce Hollingsworth, Michael Klag, Kim Longfield, Maria de Fatima Marinho de Souza, Peter Piot, JVR Prasada Rao, John-Arne Røttingen, Peter

Smith, Marc Sprenger, Trevor Sutton, Sarah Curran, Edmond SW Ng, on behalf of the Independent Advisory Committee to the Global Burden of Disease
Published Online: 18 March 2015
DOI: http://dx.doi.org/10.1016/S0140-6736(15)60024-1
Summary
Epidemiological data provide the metrics from which burdens attributable to different diseases and conditions causing ill health can be estimated. Comprehensive, consistent, and coherent health estimates, together with information about any associated uncertainties, are indispensable for decision making by governments, non-governmental organisations, practitioners, and national and international funders in helping to gauge and track the changing demands and challenges presented by poor health. Estimates of disease burden are an essential platform for public health policy and priority setting, and for evaluating intervention programmes.
Articles
Severe Ebola virus disease with vascular leakage and multiorgan failure: treatment of a patient in intensive care
Timo Wolf, MD, Gerrit Kann, Prof Stephan Becker, MD, Christoph Stephan, MD, Hans-Reinhardt Brodt, MD, Philipp de Leuw, MD, Thomas Grünewald, MD, Thomas Vogl, MD, Prof Volkhard A J Kempf, MD, Prof Oliver T Keppler, MD, Prof Kai Zacharowski, MD
Published Online: 18 December 2014
DOI: http://dx.doi.org/10.1016/S0140-6736(14)62384-9
Supplementary video
Zacharovsky and colleagues demonstrate infection control procedures for Ebola. Audio/Video - Download File (43.75 MB)
Summary
Background
In the current epidemic of Ebola virus disease in western Africa, many aid workers have become infected. Some of these aid workers have been transferred to specialised hospitals in Europe and the USA for intensified treatment, providing the potential for unique insight into the clinical course of Ebola virus disease under optimised supportive measures in isolation units.
Methods
A 38-year-old male doctor who had contracted an Ebola virus infection in Sierra Leone was airlifted to University Hospital Frankfurt, Germany, on day 5 after disease onset. Within 72 h of admission to the hospital's high-level isolation unit, the patient developed signs of severe multiorgan failure, including lungs, kidneys, and gastrointestinal tract. In addition to clinical parameters, the diagnostic work-up included radiography, ultrasound, pulse contour cardiac output technology, and microbiological and clinical chemistry analyses. Respiratory failure with pulmonary oedema and biophysical evidence of vascular leak syndrome needed mechanical ventilation. The patient received a 3 day treatment course with FX06 (MChE-F4Pharma, Vienna, Austria), a fibrin-derived peptide under clinical development for vascular leak syndrome. After FX06 administration and concurrent detection of Ebola-virus-specific antibodies and a fall in viral load, vascular leak syndrome and respiratory parameters substantially improved. We gave broad-spectrum empiric antimicrobial therapy and the patient needed intermittent renal replacement therapy. The patient fully recovered.
Findings
This case report shows the feasibility of delivery of successful intensive care therapy to patients with Ebola virus disease under biosafety level 4 conditions.
Interpretation

The effective treatment of vascular leakage and multiorgan failure by combination of ventilatory support, antibiotic treatment, and renal replacement therapy can sustain a patient with severe Ebola virus disease until virological remission. FX06 could potentially be a valuable agent in contribution to supportive therapy.
Funding
University Hospital of Frankfurt.

The Lancet Global Health
Apr 2015 Volume 3 Number 4 e178-e239
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

The Lancet Infectious Diseases
Apr 2015 Volume 15 Number 4 p361-486
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 19, Issue 4, April 2015
http://link.springer.com/journal/10995/19/4/page/1
[Reviewed earlier]

Medical Decision Making (MDM)
April 2015; 35 (3)
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
March 2015 Volume 93, Issue 1 Pages 1–222
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue
[Reviewed earlier]

Nature
Volume 520 Number 7546 pp131-258 9 April 2015
http://www.nature.com/nature/current_issue.html
Nature / *Letter near-final version*
Single-dose attenuated Vesiculovax vaccines protect primates against Ebola Makona virus
Chad E. Mire, Demetrius Matassov, Joan B. Geisbert, Theresa E. Latham, Krystle N. Agans, Rong Xu, Ayuko Ota-Setlik, Michael A. Egan, Karla A. Fenton, David K. Clarke, John H. Eldridge & Thomas W. Geisbert

Affiliations
Contributions
Corresponding author
Published online
08 April 2015

The family Filoviridae contains three genera, Ebolavirus (EBOV), Marburg virus, and Cuevavirus[1]. Some members of the EBOV genus, including Zaire ebolavirus (ZEBOV), can cause lethal haemorrhagic fever in humans. During 2014 an unprecedented ZEBOV outbreak occurred in West Africa and is still ongoing, resulting in over 10,000 deaths, and causing global concern of uncontrolled disease. To meet this challenge a rapid-acting vaccine is needed. Many vaccine approaches have shown promise in being able to protect nonhuman primates against ZEBOV[2]. In response to the current ZEBOV outbreak several of these vaccines have been fast tracked for human use. However, it is not known whether any of these vaccines can provide protection against the new outbreak Makona strain of ZEBOV. One of these approaches is a first-generation recombinant vesicular stomatitis virus (rVSV)-based vaccine expressing the ZEBOV glycoprotein (GP) (rVSV/ZEBOV). To address safety concerns associated with this vector, we developed two candidate, further-attenuated rVSV/ZEBOV vaccines. Both attenuated vaccines produced an approximately tenfold lower vaccine-associated viraemia compared to the first-generation vaccine and both provided complete, single-dose protection of macaques from lethal challenge with the Makona outbreak strain of ZEBOV.

Nature Medicine
March 2015, Volume 21 No 3 pp199-294
http://www.nature.com/nm/journal/v21/n3/index.html
[Reviewed earlier]

Nature Reviews Immunology
March 2015 Vol 15 No 3
http://www.nature.com/nri/journal/v15/n3/index.html
[Reviewed earlier]

New England Journal of Medicine
April 9, 2015 Vol. 372 No. 15
http://www.nejm.org/toc/nejm/medical-journal
Perspective
The Next Epidemic — Lessons from Ebola
Bill Gates
N Engl J Med 2015; 372:1381-1384 April 9, 2015 DOI: 10.1056/NEJMp1502918
Extract

Perhaps the only good news from the tragic Ebola epidemic in Guinea, Sierra Leone, and Liberia is that it may serve as a wake-up call: we must prepare for future epidemics of diseases that may spread more effectively than Ebola. There is a significant chance that an epidemic of a substantially more infectious disease will occur sometime in the next 20 years; after all, we saw major epidemics during the 20th century, including the Spanish influenza epidemic of 1918–1919 and the ongoing pandemic of human immunodeficiency virus. In fact, of all the things that

could kill more than 10 million people around the world, the most likely is an epidemic stemming from either natural causes or bioterrorism…

…A Global Call to Action

Despite efforts by the United States and a few other countries, there are still big holes in the world's ability to respond to an epidemic. Other countries may be more likely to step up if they see an overall plan and understand their role in it. We need a rigorous study of the cost of building a global warning and response system and a plan for contributions from various countries.

Through the United Nations, some global institution could be empowered and funded to coordinate the system. The United Nations and the WHO are studying the lessons from the Ebola epidemic and ways to improve international crisis management; these evaluations can provide a starting point for discussions of ways to strengthen the WHO's capacity and about which parts of the process it should lead and which ones others (including the World Bank and the G7 countries) should lead in close coordination. The conversation should include military alliances such as NATO, which should make epidemic response a priority. The final arrangement should include a reserve corps of experts with the broad range of skills needed in an epidemic. An epidemic is one of the few catastrophes that could set the world back drastically in the next few decades. By building a global warning and response system, we can prepare for it and prevent millions of deaths.

Recommendations for Preparing for Future Epidemics

The world needs to build a warning and response system for outbreaks. This system should

- be coordinated by a global institution that is given enough authority and funding to be effective,
- enable fast decision making at a global level,
- expand investment in research and development and clarify regulatory pathways for developing new tools and approaches,
- improve early warning and detection systems, including scalable everyday systems that can be expanded during an epidemic,
- involve a reserve corps of trained personnel and volunteers,
- strengthen health systems in low- and middle-income countries, and
- incorporate preparedness exercises to identify the ways in which the response system needs to improve.

Pediatrics

April 2015, VOLUME 135 / ISSUE 4

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

[No new relevant content]

Pharmacoeconomics

Volume 33, Issue 4, April 2015

http://link.springer.com/journal/40273/33/4/page/1
[New issue; No relevant content]

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
(Accessed 11 April 2015)
Public Knowledge, Perception and Source of Information on Ebola Virus Disease – Lagos, Nigeria; September, 2014
April 8, 2015 · Research
Background: The first ever outbreak of Ebola virus disease (EVD) in Nigeria was declared in July, 2014. Level of public knowledge, perception and adequacy of information on EVD were unknown. We assessed the public preparedness level to adopt disease preventive behavior which is premised on appropriate knowledge, perception and adequate information.
Methods: We enrolled 5,322 respondents in a community-based cross-sectional study. We used interviewer-administered questionnaire to collect data on socio-demographic characteristics, EVD–related knowledge, perception and source of information. We performed univariate and bivariate data analysis using Epi-Info software setting p-value of 0.05 as cut-off for statistical significance.
Results: Mean age of respondents was 34 years (± 11.4 years), 52.3% were males. Forty one percent possessed satisfactory general knowledge; 44% and 43.1% possessed satisfactory knowledge on mode of spread and preventive measures, respectively. Residing in EVD cases districts, male respondents and possessing at least secondary education were positively associated with satisfactory general knowledge (p-value: 0.01, 0.001 and 0.000004, respectively). Seventy one percent perceived EVD as a public health problem while 61% believed they cannot contract the disease. Sixty two percent and 64% of respondents will not shake hands and hug a successfully treated EVD patient respectively. Only 2.2% of respondents practice good hand-washing practice. Television (68.8%) and radio (55.0%) are the most common sources of information on EVD.
Conclusions: Gaps in EVD-related knowledge and perception exist. Targeted public health messages to raise knowledge level, correct misconception and discourage stigmatization should be widely disseminated, with television and radio as media of choice.

PLoS Medicine
(Accessed 11 April 2015)
http://www.plosmedicine.org/
Policy Forum
Improving Men's Participation in Preventing Mother-to-Child Transmission of HIV as a Maternal, Neonatal, and Child Health Priority in South Africa
Wessel van den Berg, Kirsty Brittain, Gareth Mercer, Dean Peacock, Kathryn Stinson, Hanna Janson, Vuyiseka Dubula
Published: April 7, 2015
DOI: 10.1371/journal.pmed.1001811
Summary Points
- Involving male partners in programmes to prevent mother-to-child transmission of HIV may improve programme coverage and infant outcomes.

- Rates of male partner involvement remain low worldwide, and detailed guidelines to increase involvement are lacking in South Africa.
- We recommend that South African national and provincial guidelines and policies for preventing mother-to-child HIV transmission be adjusted to explicitly include a focus on increasing male partner involvement and that they include concrete descriptions of how to achieve this.
- We propose recommendations for improving male partner involvement at a policy, facility, and community level.
- Challenges to improving male partner involvement include the nature of relationships and family structures in South Africa and the capacity of health systems to implement recommendations.

PLoS Neglected Tropical Diseases

http://www.plosntds.org/

(Accessed 11 April 2015)

Control, Elimination, and Eradication of River Blindness: Scenarios, Timelines, and Ivermectin Treatment Needs in Africa

Young Eun Kim, Jan H. F. Remme, Peter Steinmann, Wilma A. Stolk, Jean-Baptiste Roungou, Fabrizio Tediosi Research Article | published 10 Apr 2015 | PLOS Neglected Tropical Diseases 10.1371/journal.pntd.0003664

Research Article

Community-Centered Responses to Ebola in Urban Liberia: The View from Below

Sharon Alane Abramowitz, Kristen E. McLean, Sarah Lindley McKune, Kevin Louis Bardosh, Mosoka Fallah, Josephine Monger, Kodjo Tehoungue, Patricia A. Omidian

Published: April 9, 2015

DOI: 10.1371/journal.pntd.0003706

Abstract

Background

The West African Ebola epidemic has demonstrated that the existing range of medical and epidemiological responses to emerging disease outbreaks is insufficient, especially in post-conflict contexts with exceedingly poor healthcare infrastructures. In this context, community-based responses have proven vital for containing Ebola virus disease (EVD) and shifting the epidemic curve. Despite a surge in interest in local innovations that effectively contained the epidemic, the mechanisms for community-based response remain unclear. This study provides baseline information on community-based epidemic control priorities and identifies innovative local strategies for containing EVD in Liberia.

Methodology/Principal Findings

This study was conducted in September 2014 in 15 communities in Monrovia and Montserrado County, Liberia – one of the epicenters of the Ebola outbreak. Findings from 15 focus group discussions with 386 community leaders identified strategies being undertaken and recommendations for what a community-based response to Ebola should look like under then-existing conditions. Data were collected on the following topics: prevention, surveillance, care-giving, community-based treatment and support, networks and hotlines, response teams, Ebola treatment units (ETUs) and hospitals, the management of corpses, quarantine and isolation, orphans, memorialization, and the need for community-based training and education. Findings have been presented as community-based strategies and recommendations for (1) prevention, (2) treatment and response, and (3) community sequelae and recovery. Several models for

community-based management of the current Ebola outbreak were proposed. Additional findings indicate positive attitudes towards early Ebola survivors, and the need for community-based psychosocial support.
Conclusions/Significance
Local communities' strategies and recommendations give insight into how urban Liberian communities contained the EVD outbreak while navigating the systemic failures of the initial state and international response. Communities in urban Liberia adapted to the epidemic using multiple coping strategies. In the absence of health, infrastructural and material supports, local people engaged in self-reliance in order to contain the epidemic at the micro-social level. These innovations were regarded as necessary, but as less desirable than a well-supported health-systems based response; and were seen as involving considerable individual, social, and public health costs, including heightened vulnerability to infection.
Author Summary
In this study the authors analyzed data from the 2014 Ebola outbreak in Monrovia and Montserrado County, Liberia. The data were collected for the purposes of program design and evaluation by the World Health Organization (WHO) and the Government of Liberia (GOL), in order to identify: (1) local knowledge about EVD, (2) local responses to the outbreak, and (3) community-based innovations to contain the virus. At the time of data collection, the international Ebola response had little insight into how much local Liberian communities knew about Ebola, and how communities managed the epidemic when they could not get access to care due to widespread hospital and clinic closures. Methods included 15 focus group discussions with community leaders from areas with active Ebola cases. Participants were asked about best practices and what they were currently doing to manage EVD in their respective communities, with the goal of developing conceptual models of local responses informed by local narratives. Findings reveal that communities responded to the outbreak in numerous ways that both supported and discouraged formal efforts to contain the spread of the disease. This research will inform global health policy for both this, and future, epidemic and pandemic responses.

PLoS One
[Accessed 11 April 2015]
http://www.plosone.org/
Can Reproductive Health Voucher Programs Improve Quality of Postnatal Care? A Quasi-Experimental Evaluation of Kenya's Safe Motherhood Voucher Scheme
Claire Watt, Timothy Abuya, Charlotte E. Warren, Francis Obare, Lucy Kanya, Ben Bellows
Research Article | published 02 Apr 2015 | PLOS ONE 10.1371/journal.pone.0122828

PLoS Pathogens
http://journals.plos.org/plospathogens/
(Accessed 11 April 2015)
[No new relevant content]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/

(Accessed 11 April 2015)

Robust and sustained immune activation in human Ebola virus infection

Judith N. Mandla and Mark B. Feinbergb,1
Author Affiliations

Extract

Ebola viruses (EBOV) are zoonotic infectious agents that are highly pathogenic in humans, causing severe hemorrhagic fever with fatality rates of ∼50–70% (1). This genus of negative single-stranded RNA viruses consists of five known species that are part of the Filoviridae family. The current EBOV outbreak in western Africa began in March 2014 and has since resulted in >24,000 cases and >10,000 deaths (1). This 25th known EBOV outbreak is unprecedented in its magnitude, duration, and societal impact. Given the likelihood of future EBOV outbreaks, significant efforts are being devoted to develop vaccines that block EBOV transmission and novel therapeutic interventions to treat infected individuals (2, 3). Progress in these pursuits requires better understanding of what key elements of the immune response correlate with virus replication control and protection from disease. In PNAS, McElroy et al. report the results of their study of the cellular and humoral immune responses of four EBOV-infected people treated at Emory University (all of whom received experimental therapies) (4). Their data provide critical insight into aspects of the host response in humans to EBOV that have not previously been examined using contemporary immunologic methods, and provide the foundation for future studies, elucidating immune responses mediating effective virus control.

Effective and lesion-free cutaneous influenza vaccination

Ji Wang1, Bo Li1, and Mei X. Wu2
Author Affiliations

Significance

Skin is more potent than muscle for vaccination, but it is not yet a common site for immunization, in part owing to relatively high rates of pain and skin irritation and difficulty of administration. We resolve this dilemma by delivering vaccines into many micropores in the skin, which constrains vaccine-induced inflammation, leading to fast healing and lesion-free. Moreover, combination of microfractional vaccine delivery with nonablative fractional laser (NAFL), not only significantly augmented vaccine efficiency but also broadened cross-protection against homologous and heterologous influenza viral infections. Cross-protective immunity is pivotal for influenza vaccines because mismatches occur frequently between vaccine viral strains and circulating viruses. To the best of our knowledge, this represents the first strategy for lesion-free efficient cutaneous vaccination.

Abstract

The current study details efficient lesion-free cutaneous vaccination via vaccine delivery into an array of micropores in the skin, instead of bolus injection at a single site. Such delivery effectively segregated vaccine-induced inflammation, resulting in rapid resolution of the inflammation, provided that distances between any two micropores were sufficient. When the inoculation site was treated by FDA-approved nonablative fractional laser (NAFL) before insertion of a PR8 model influenza vaccine-packaged, biodegradable microneedle array (MNs), mice displayed vigorous antigen-uptake, eliciting strong Th1-biased immunity. These animals were completely protected from homologous viral challenges, and fully or partially protected from heterologous H1N1 and H3N2 viral challenges, whereas mice receiving MNs alone suffered from severe illnesses or died of similar viral challenges. NAFL-mediated adjuvanicity was ascribed primarily to dsDNA and other "danger" signals released from laser-damaged skin cells. Thus, mice deficient in dsDNA-sensing pathway, but not Toll like receptor (TLR) or inflammasome pathways, showed poor responses to NAFL. Importantly, with this novel

approach both mice and swine exhibited strong protective immunity without incurring any appreciable skin irritation, in sharp contrast to the overt skin irritation caused by intradermal injections. The effective lesion-free cutaneous vaccination merits further clinical studies.

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

Proceedings of the Royal Society B
07 March 2015; volume 282, issue 1802
http://rspb.royalsocietypublishing.org/content/282/1802?current=y
[Reviewed earlier]

Public Health Ethics
Volume 8 Issue 1 April 2015
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Qualitative Health Research
April 2015; 25 (4)
http://qhr.sagepub.com/content/current
Special Issue: Perceptions of Caregivers
[Reviewed earlier]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
February 2015 Vol. 37, No. 2
http://www.paho.org/journal/index.php?option=com_content&view=article&id=151&Itemid=266&lang=en
ARTÍCULOS DE INVESTIGACIÓN ORIGINAL / ORIGINAL RESEARCH ARTICLES
An adequacy evaluation of a maternal health intervention in rural Honduras: the impact of women [Evaluación de la suficiencia de una intervención de salud materna en un entorno rural de Honduras: repercusión de la participación de los hombres y el empoderamiento de las mujeres]
Peter R. Berti, Salim Sohani, Edith da Costa, Naomi Klaas, Luis Amendola, and Joel Duron
TEMAS DE ACTUALIDAD / CURRENT TOPIC
Trends in research involving human beings in Brazil [Tendencias en la investigación con seres humanos en el Brasil]
Ricardo Eccard da Silva, Maria Rita Carvalho Novaes, Elza Martínez Pastor, Elena Barragan, and Angélica Amorim Amato

Risk Analysis
February 2015 Volume 35, Issue 2 Pages 179–344
http://onlinelibrary.wiley.com/doi/10.1111/risa.2015.35.issue-2/issuetoc
[Reviewed earlier]

Science
10 April 2015 vol 348, issue 6231, pages 153-256
http://www.sciencemag.org/current.dtl
Editorial
NIH research: Think globally
Anthony S. Fauci1, Francis S. Collins2,
1Anthony S. Fauci is director of the U.S. National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD.
2Francis S. Collins is director of the U.S. National Institutes of Health, Bethesda, MD.

The U.S. National Institutes of Health (NIH) has for more than 60 years supported research to improve the health and prolong the lives of people in the United States and around the world. Mean life expectancy worldwide has doubled to more than 70 years, due in large part to medical and public health interventions developed with NIH funding. Now, in the face of serious fiscal constraints, the idea has reemerged from some congressional leaders and disease constituency groups to more closely align NIH funding for disease research with disease burden in the United States. Although the nation must maintain robust research support for diseases that cause illness and death among large numbers of Americans, it would be unwise to deemphasize diseases that exact their largest toll elsewhere in the world. The United States has a vital interest in the health of people around the globe, rooted in an enduring tradition of humanitarian concern as well as in enlightened self-interest. Engagement in global health protects the nation's citizens, enhances the economy, and advances U.S. interests abroad.

People from all walks of life understand and appreciate the moral imperative to alleviate human suffering, regardless of where it occurs. Polls show that Americans support efforts to improve health in developing countries, both for the sake of those individuals and for the sake of Americans exposed to infectious diseases that transcend national boundaries. The recent outbreak of Ebola virus disease in West Africa, which quickly found its way to the United States, is one more reminder of how global health challenges can become domestic. The concept of medical diplomacy—winning the hearts and minds of people in poor countries by exporting medical interventions, expertise, and personnel to improve their health—also resonates with many Americans, as does reducing instability in places where the United States has substantial economic and political interests.

The U.S. government, the largest funder of global health research and development, has played a central role in developing medical interventions that have saved countless lives in the world's poorest countries. Smallpox has been eradicated, polio nearly eliminated, and important infectious diseases of childhood controlled with vaccines. An extraordinary 7.6 million AIDS deaths were averted in low- and middle-income countries between 2003 and 2013 by the development and distribution of antiretroviral drugs to treat HIV infection. Future products, including improved drugs for tuberculosis, treatments for parasitic diseases, vaccines for malaria, and new strategies to prevent and treat HIV infection could save millions more lives. Also, studying such complex diseases provides new insights that can advance how we diagnose, treat, and prevent other health challenges, including many commonly seen in the United States.

For example, the treatment of hepatitis B virus infection has been revolutionized by antiviral drugs originally developed to treat HIV infection.

History shows that the tools of modern biology offer the opportunity to practically elimate major diseases that sap human health and exacerbate instability in areas where the United States has substantial interests. It is imperative that the nation sustain momentum and work with its global partners to deliver the fruits of global research to the people who need them most, both at home and abroad. Without such a commitment, we may miss opportunities to curtail or even eliminate important diseases such as AIDS and also risk the resurgence of major global health threats such as drug-resistant bacteria, tuberculosis, and malaria, for which new interventions are badly needed.

In 1940, President Franklin D. Roosevelt noted that "NIH speaks the universal language of humanitarianism… [it] has recognized no limitations imposed by international boundaries and has recognized no distinctions of race, of creed, or of color." The NIH—and the United States—must continue to live by these words.

Social Science & Medicine
Volume 131, In Progress (April 2015)
http://www.sciencedirect.com/science/journal/02779536/131
[Reviewed earlier]

Tropical Medicine and Health
Vol. 43(2015) No. 1
https://www.jstage.jst.go.jp/browse/tmh/43/0/_contents
[Reviewed earlier]

Tropical Medicine & International Health
May 2015 Volume 20, Issue 5 Pages 553–680
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2015.20.issue-5/issuetoc
Original Article
Using multi-country household surveys to understand who provides reproductive and maternal health services in low- and middle-income countries: a critical appraisal of the Demographic and Health Surveys
K. Footman1,*, L. Benova1, C. Goodman2, D. Macleod1, C. A. Lynch1, L. Penn-Kekana1 and O. M. R. Campbell1Article first published online: 5 MAR 2015
DOI: 10.1111/tmi.12471 You have full text access to this OnlineOpen article
Abstract
Objective
The Demographic and Health Surveys (DHS) are a vital data resource for cross-country comparative analyses. This study is part of a set of analyses assessing the types of providers being used for reproductive and maternal health care across 57 countries. Here, we examine some of the challenges encountered using DHS data for this purpose, present the provider classification we used, and provide recommendations to enable more detailed and accurate cross-country comparisons of healthcare provision.
Methods

We used the most recent DHS surveys between 2000 and 2012; 57 countries had data on family planning and delivery care providers and 47 countries had data on antenatal care. Every possible response option across the 57 countries was listed and categorised. We then developed a classification to group provider response options according to two key dimensions: clinical nature and profit motive.
Results
We classified the different types of maternal and reproductive healthcare providers, and the individuals providing care. Documented challenges encountered during this process were limitations inherent in household survey data based on respondents' self-report; conflation of response options in the questionnaire or at the data processing stage; category errors of the place vs. professional for delivery; inability to determine whether care received at home is from the public or private sector; a large number of negligible response options; inconsistencies in coding and analysis of data sets; and the use of inconsistent headings.
Conclusions
To improve clarity, we recommend addressing issues such as conflation of response options, data on public vs. private provider, inconsistent coding and obtaining metadata. More systematic and standardised collection of data would aid international comparisons of progress towards improved financial protection, and allow us to better characterise the incentives and commercial nature of different providers.

Vaccine
Volume 33, Issue 19, Pages 2197-2296 (5 May 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/19
Conference report
Vaccines, our shared responsibility
Pages 2197-2202
Sonia Pagliusi, Rishabh Jain, Rajinder Kumar Suri, the DCVMN Executive Committee Group
Abstract
The Developing Countries Vaccine Manufacturers' Network (DCVMN) held its fifteenth annual meeting from October 27–29, 2014, New Delhi, India. The DCVMN, together with the co-organizing institution Panacea Biotec, welcomed over 240 delegates representing high-profile governmental and nongovernmental global health organizations from 36 countries.
Over the three-day meeting, attendees exchanged information about their efforts to achieve their shared goal of preventing death and disability from known and emerging infectious diseases.

Special praise was extended to all stakeholders involved in the success of polio eradication in South East Asia and highlighted challenges in vaccine supply for measles-rubella immunization over the coming decades. Innovative vaccines and vaccine delivery technologies indicated creative solutions for achieving global immunization goals.

Discussions were focused on three major themes including regulatory challenges for developing countries that may be overcome with better communication; global collaborations and partnerships for leveraging investments and enable uninterrupted supply of affordable and suitable vaccines; and leading innovation in vaccines difficult to develop, such as dengue, Chikungunya, typhoid-conjugated and EV71, and needle-free technologies that may speed up vaccine delivery. Moving further into the Decade of Vaccines, participants renewed their commitment to shared responsibility toward a world free of vaccine-preventable diseases.

Cost–benefit of the introduction of new strategies for vaccination against pertussis in Spain: Cocooning and pregnant vaccination strategies
Original Research Article
Pages 2213-2220
María Isabel Fernández-Cano, Lluís Armadans Gil, Magda Campins Martí
Highlights
- The high incidence of pertussis in infants requires short-term preventive measures.
- Infant hospitalizations would decrease more with maternal vaccination than with cocoon strategy.
- The NNV to avoid a case would be more favorable for the pregnant vaccination approach.
- Benefit-to-cost ratio would be better for the pregnant vaccination.

Accounting for personal and professional choices for pandemic influenza vaccination amongst English healthcare workers
Original Research Article
Pages 2267-2272
Afrodita Marcu, Helena Rubinstein, Susan Michie, Lucy Yardley

Web-based intensive monitoring of adverse events following influenza vaccination in general practice
Original Research Article
Pages 2283-2288
Leontine van Balveren-Slingerland, Agnes Kant, Linda Härmark

Vaccine
Volume 33, Issue 18, Pages 2097-2196 (27 April 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/18

Effectiveness and impact of rotavirus vaccines in Europe, 2006–2014
Review Article
Pages 2097-2107
Emilie Karafillakis, Sondus Hassounah, Christina Atchison
Highlights
- Seven European countries have implemented rotavirus vaccination at a national level.
- Vaccine effectiveness against rotavirus ranges from 68% to 98% in Europe.
- Reductions in rotavirus hospitalisations ranged from 65% to 84% in Europe.
- Our results confirm the public health benefit of rotavirus vaccination in Europe.
- Our results support the implementation of universal rotavirus vaccination in Europe.

Influenza vaccination during pregnancy: A systematic review of fetal death, spontaneous abortion, and congenital malformation safety outcomes
Review Article
Pages 2108-2117
M. McMillan, K. Porritt, D. Kralik, L. Costi, H. Marshall
Highlights
- This article presents the findings of a systematic review that includes analysis of critical adverse events including congenital malformation, fetal death, and spontaneous abortion.
- It provides a detailed analysis of individual study characteristics and argues that meta-analysis for these outcomes may not be appropriate due to clinical and methodological heterogeneity.
- The systematic review investigates 1st trimester immunisation for congenital malformation outcomes, raising crucial design issues for future research studies.

- Results did not indicate that maternal influenza vaccination is associated with an increased risk of fetal death, spontaneous abortion, or congenital malformations.
- The review includes previously unpublished data and definitions from four studies and detailed vaccine composition where known

Influenza and pertussis vaccination coverage in pregnant women

Original Research Article

Pages 2125-2131

Jolien Laenen, Mathieu Roelants, Roland Devlieger, Corinne Vandermeulen

Highlights

- 42.8% of pregnant women had immunization records for flu and 39.2% for pertussis, 23.6% had documentation for both vaccines.
- The coverage increases to 62% for influenza and 46% for pertussis when oral communication was considered in addition.
- Obstetricians and GP are most influential in decision of pregnant women to vaccinate.
- Women with a low education and those of foreign origin are more vulnerable for non-vaccination.

Vaccine coverage estimation using a computerized vaccination registry with potential underreporting and a seroprevalence study

Original Research Article

Pages 2183-2188

Lina Pérez Breva, Javier Díez Domingo, Miguel Ángel Martínez Beneito, Joan Puig Barberà

Abstract

Objective

To develop a method to estimate vaccination coverage using both a computerized vaccine registry with an unknown underreporting rate and a seroprevalence study. A real example of a meningococcal C conjugate vaccine (MCCV) coverage estimation is studied to illustrate the proposed methodology.

Methods

We reviewed the Vaccine Information System of Valencia (Sistema de Información Vacunal, SIV) for the MCCV status of 1430 subjects aged 3–29 years as part of a seroprevalence study. When MCCV was not registered in SIV, subjects were classified into three groups (MCCV non-registered, no vaccination records and missing information) depending on the registry of other vaccines. A Bayesian model was developed to ascertain the percentage of MCCV-vaccinated subjects based on the meningococcal C seroprotection levels from the seroprevalence study.

Results

The seroprotection levels in subjects with no MCCV registered in SIV (358) were similar to those in subjects with MCCV registered (1072). This indicated a large proportion of vaccinated subjects with no MCCV registered. The estimated vaccine coverage was over 80% in all age groups, except >22 years, where it was 67.6% (95% CI: [54.0–80.4]), which corresponded to those aged over 13 years at the time of the catch-up campaign. An underreporting rate of 23.5–73.4%, depending on the age group, was estimated in those vaccinated in the 2002 catch-up campaign.

Conclusion

The Bayesian model allowed for a more realistic estimation of MCCV uptake. In this example, we quantified the underreporting of a vaccine registry, especially occurring during a catch-up campaign that occurred at the establishment of the registry.

Vaccine

Volume 33, Issue 17, Pages 1999-2096 (21 April 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/17

WHO consultation on clinical evaluation of vaccines, 17–18 July 2014, WHO Headquarters, Geneva, Switzerland

Pages 1999-2003
Ivana Knezevic, Vasee Moorthy, Rebecca Sheets
Abstract

A World Health Organization (WHO) consultation on guidelines for National Regulatory Authorities (NRAs) and vaccine manufacturers on clinical evaluation of vaccines was held from 17 to 18 July 2014, to review key scientific challenges that regulators have been facing since the establishment of the WHO Guidelines on Clinical Evaluation of Vaccines. The guidelines, adopted by the WHO Expert Committee on Biological Standardization (ECBS) in 2001, have served as the basis for setting or updating national requirements for the evaluation and licensing of a broad range of vaccines as well as for WHO vaccine prequalification. Regulators from Australia, Brazil, China, Canada, Germany, India, Republic of Korea, South Africa, United States of America and the United Kingdom were represented. The International Federation for Pharmaceutical Manufacturers' Association (IFPMA) and the Developing Country Vaccine Manufacturers' Network (DCVMN) provided industry representation.

The consultation concluded that the guidelines should be revised to address issues that were raised in the context of vaccines that were the subject of clinical development in the past decade. Although the current guidelines have served well over time, it was recognized that an update would further increase their utility and would help regulators, manufacturers, vaccine developers and academia to respond to the challenging questions regarding the safety, immunogenicity, efficacy and effectiveness of vaccines intended for global use. A summary of the main outcomes of the consultation and proposals for the next steps regarding the guidelines and beyond are provided in this report.

Implementation of pertussis immunization in health-care personnel

Original Research Article
Pages 2009-2014
Kathi Walther, Marie-Anne Burckhardt, Thomas Erb, Ulrich Heininger
Highlights

- Contact persons of newborns should receive pertussis vaccine to decrease transmission.
- We implemented this recommendation for health-care personnel with a campaign.
- Compliance with pertussis immunization was higher in newly hired staff.
- Mandatory appointments with occupational health service are needed for optimal coverage.

Alternative delivery of a thermostable inactivated polio vaccine

Original Research Article
Pages 2030-2037
Heleen Kraan, Ivo Ploemen, Gijsbert van de Wijdeven, Ivo Que, Clemens Löwik, Gideon Kersten, Jean-Pierre Amorij
Highlights

- Potential of Bioneedle technology for inactivated polio vaccine (IPV) was evaluated.
- IPV in Bioneedles is more resistant to elevated temperatures than liquid IPV.
- Comparable immunogenicity of IPV-Bioneedle and liquid IPV after booster vaccination.
- Similar kinetics at administration site for Bioneedle compared to liquid injection.
- LPS-derivate PagL is potent adjuvant for liquid IPV, not for IPV-Bioneedles.

Accelerating measles elimination and strengthening routine immunization services in Guizhou Province, China, 2003–2009

Original Research Article
Pages 2050-2055
Shuyan Zuo, Lisa Cairns, Yvan Hutin, Xiaofeng Liang, Yibing Tong, Qing Zhu, Dayong Zhang, Lisa A. Lee, Peter Strebel, Linda Quick

Highlights

- Measles control over seven years in Guizhou Province comprised diverse strategies.
- Infant and primary-school-entry vaccination coverage of all antigens increased.
- Incidence of measles dropped.
- The strategies are a model for extension to other lesser-developed provinces.

Pertussis in infants under one year old: Risk markers and vaccination status—A case-control study

Original Research Article
Pages 2073-2078
Chen Stein Zamir, Dana Bardugo Dahan, Hanna Shoob

Highlights

- Low birthweight and high birth order were found to be independent risk markers for pertussis in young infants.
- A third of reported pertussis cases in infants occurred under age 2 months (currently recommended for the 1st pertussis vaccine dose).
- Reported pertussis cases over age 2 months were more likely to be unvaccinated and to have delayed vaccinations.
- In 2-4-month-old infants, 1 dose of pertussis vaccine gave significant protection against pertussis overall and pertussis hospitalization.
- The pertussis vaccine effectiveness increased with the number of vaccine doses.

Economic evaluation of typhoid vaccination in a prolonged typhoid outbreak setting: The case of Kasese district in Uganda

Original Research Article
Pages 2079-2085
Cristina Carias, Maroya Spalding Walters, Edward Wefula, Kashmira A. Date, David L. Swerdlow, Maya Vijayaraghavan, Eric Mintz

Abstract

Background

Vaccination has been increasingly promoted to help control epidemic and endemic typhoid fever in high-incidence areas. Despite growing recognition that typhoid incidence in some areas of sub-Saharan Africa is similar to high-incidence areas of Asia, no large-scale typhoid vaccination campaigns have been conducted there. We performed an economic evaluation of a hypothetical one-time, fixed-post typhoid vaccination campaign in Kasese, a rural district in Uganda where a large, multi-year outbreak of typhoid fever has been reported.

Methods

We used medical cost and epidemiological data retrieved on-site and campaign costs from previous fixed-post vaccination campaigns in Kasese to account for costs from a public sector health care delivery perspective. We calculated program costs and averted disability-adjusted life years (DALYs) and medical costs as a result of vaccination, to calculate the cost of the intervention per DALY and case averted.

Results

Over the 3 years of projected vaccine efficacy, a one-time vaccination campaign was estimated to avert 1768 (90%CI: 684–4431) typhoid fever cases per year and a total of 3868 (90%CI: 1353–9807) DALYs over the duration of the immunity conferred by the vaccine. The cost of the

intervention per DALY averted was US$ 484 (90%CI: 18–1292) and per case averted US$ 341 (90%CI: 13–883).
Conclusion
We estimated the vaccination campaign in this setting to be highly cost-effective, according to WHO's cost-effective guidelines. Results may be applicable to other African settings with similar high disease incidence estimates.

Vaccines — Open Access Journal
(Accessed 11 April 2015)
http://www.mdpi.com/journal/vaccines
[No new relevant cntent]

Value in Health
March 2015 Volume 18, Issue 2, p137-354
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

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

No new digest content identified.

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Media/Policy Watch

This section is intended to alert readers to substantive news, analysis and opinion from the general media on vaccines, immunization, global; public health and related themes. *Media Watch* is not intended to be exhaustive, but indicative of themes and issues CVEP is actively tracking. This section will grow from an initial base of newspapers, magazines and blog sources, and is segregated from *Journal Watch* above which scans the peer-reviewed journal ecology.

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

Al Jazeera
http://america.aljazeera.com/search.html?q=vaccine
Accessed 11 April 2015
California bill to ban childhood vaccine exemptions advances
Senate health committee approves bill to require vaccinations, eliminating exemptions for personal or religious beliefs
April 9, 2015 2:52PM ET

California lawmakers on Wednesday advanced a bill that would require schoolchildren in the state to be vaccinated, amid impassioned pleas from doctors and parents, including the activist Robert Kennedy Jr.

Under the proposal, parents would no longer be able to send unvaccinated children to school with waivers for religious or personal beliefs. Exemptions would be available only for children with health problems.

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 11 April 201
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 11 April 2015
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 11 April 2015
[No new, unique, relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 11 April 2015
Expert Brief
Global Health Goal Hits and Misses
Laurie Garrett, Senior Fellow for Global Health
April 7, 2015

This year marks the wind down of one hugely ambitious fifteen-year global development plan and the launch of another even more far-reaching one. At the moment, the new United Nations initiative—the Sustainable Development Goals (SDGs)—looks deeply flawed, featuring an encyclopedic wish-list for costly global accomplishments envisioned for the coming fifteen years. But its predecessor, the Millennium Development Goals (MDGs), also seemed impossibly aspirational, and only moderately achievable when ratified by the UN General Assembly in 2000. The MDGs, which set eight big goals, will reach their deadline for completion (or failure) this New Year's Eve…

The Economist
http://www.economist.com/
Accessed 11 April 2015
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
April 8, 2015
UN envoy upbeat on progress against Ebola

An end to the Ebola epidemic in Liberia and Sierra Leone is...David Nabarro, the UN special envoy on Ebola, says he is "upbeat" about progress but...Liberia appears closest to ending its Ebola nightmare having not recorded a new case...Andrew Ward in London

Forbes
http://www.forbes.com/
Accessed 11 April 2015
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 11 April 2015
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 11 April 2015
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 11 April 2015
Ebola: media 'overlooked Africa's role in combating crisis'
African Union says media downplayed Africans' willingness and ability to deal with Ebola and focused instead on part played by international agencies
7 April 2015
Africa's efforts to tackle the Ebola crisis have been largely overlooked even though Africans have taken the lead in providing frontline staff and shown themselves "better placed to fight infectious diseases in their continent than outsiders", according to the African Union (AU).
Dr Olawale Maiyegun, director of social affairs at the AU commission, said that despite the fact that Africans had proved both willing and able to deal with Ebola, the focus had been on the work of international agencies and those with the greatest media clout.
"Unfortunately, Africans do not have the international voice of CNN, BBC and France 24, therefore much of our work is overlooked in the western media," he said. "Most of the assistance provided by the international community is in the areas of finance and infrastructure. In the most critical human resources for health, Africans – including the affected countries – have had to take the lead."…

The Huffington Post
http://www.huffingtonpost.com/
[No new, unique, relevant content]

Mail & Guardian
http://mg.co.za/
Accessed 11 April 2015
[No new, unique, relevant content]

New Yorker

http://www.newyorker.com/
Accessed 11 April 2015
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 11 April 2015
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 11 April 2015
Business
Tekmira Approved to Continue Ebola Treatment Clinical Trials
FDA put trials on hold last year as it awaited additional information
By
Angela Chen
April 10, 2015 9:06 a.m. ET
Health Policy
Squabbles Over Testing Methods Hamper Search for Ebola Vaccine
Researchers at odds over most effective way to trial treatments
Thomas M. Burton
Updated April 9, 2015 4:42 p.m. ET
The Ebola virus outbreak in West Africa created a rare opportunity: New vaccines could be tested, and if they worked, serve as a firewall in future epidemics.
It now appears this chance is slipping away amid public health officials' squabbles over the right way to test vaccines. As a consequence, there may never be a definitive answer about the vaccines' effectiveness….

Washington Post
http://www.washingtonpost.com/
Accessed 11 April 2015
California vaccine bill sparks acidic debate, Nazi links
Judy Lin | AP | Health & Science | Apr 10, 2015
A California bill that would sharply limit vaccination waivers after a measles outbreak at Disneyland has generated such an acidic debate that the proposal's author was under added security this week.

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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.

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