Center for Vaccine Ethics and Policy
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Vaccines and Global Health: The Week in Review
18 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.*

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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 18 April 2015]
Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

WHO: Ebola Situation Report - 15 April 2015
[Excerpts]
SUMMARY
:: A total of 37 confirmed cases of Ebola virus disease (EVD) was reported in the week to 12 April, compared with 30 the previous week. Case incidence in Guinea increased to 28, compared with 21 confirmed cases the previous week. Sierra Leone reported 9 confirmed cases, the same total as in the previous week. Liberia reported no confirmed cases.
:: A total of 5 Guinean prefectures reported at least one confirmed case in the week to 12 April, compared with 6 the previous week. Transmission remains confined to the western area, and is

primarily focused on the prefecture of Forecariah, which borders Sierra Leone. In total, 8 prefectures/districts in Guinea and Sierra Leone reported a confirmed case in the week to 12 April, compared with 10 the previous week. This is the lowest number of districts to report a confirmed case since the end of May 2014. Of 55 districts in Guinea, Liberia, and Sierra Leone that have reported at least one confirmed case of EVD since the start of the outbreak, 39 have not reported a case for over 6 weeks.
:: 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…

COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION
:: There have been **a total of 25,791 reported confirmed, probable, and suspected cases of EVD in Guinea, Liberia and Sierra Leone (figure 1, table 1), with over 10,600 reported deaths** (outcomes for many cases are unknown). A total of 28 new confirmed cases were reported in Guinea, 0 in Liberia, and 9 in Sierra Leone in the 7 days to 12 April.

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WHO: Joint statement on the Ebola response and WHO reforms
16 April 2015
Statement by WHO Director-General, Deputy Director-General and Regional Directors, on the Ebola outbreak and response, and reforms to the work of WHO in outbreaks and humanitarian emergencies

1.The Ebola outbreak which started in Dec 2013 became a public health, humanitarian and socioeconomic crisis, with devastating impact on families, communities and affected countries. It also served as a reminder that the world, including WHO, is ill prepared for a large sustained disease outbreak.

2. We welcome the recommendations of the Special Session of the WHO Executive Board, in particular the proposed assessment of all aspects of the WHO response. Based on the lessons learnt, we commit ourselves to reforms that will enable WHO to play its rightful place in disease outbreaks, humanitarian emergencies and in global health security.
What have we learned?

3. We have learned lessons of humility. We have seen that old diseases in new contexts consistently spring new surprises. We have taken serious note of the criticisms of the Organization that, inter alia, the initial WHO response was slow and insufficient, we were not aggressive in alerting the world, our surge capacity was limited, we did not work effectively in coordination with other partners, there were shortcomings in risk communications, and there were was confusion of roles and responsibilities at the three levels of the Organization.

4. We have learned lessons of fragility. We have seen that health gains –fewer child deaths, malaria coming under control, more women surviving child birth – are all too easily reversed,

when built on fragile health systems, which are quickly overwhelmed and collapse in the face of an outbreak of this nature.

5. We have learned the importance of capacity. We can mount a highly effective response to small and medium-sized outbreaks, but when faced with an emergency of this scale, our current systems – national and international - simply have not coped.

6. We have learned lessons of community and culture. A significant obstacle to an effective response has been the inadequate engagement with affected communities and families. This is not simply about getting the right messages across; we must learn to listen if we want to be heard. We have learned the importance of respect for culture in promoting safe and respectful funeral and burial practices. Empowering communities must be an action, not a cliché.

7. We have learned lessons of solidarity. In a disease outbreak, all are at risk. We have learned that that the global surveillance and response system is only as strong as its weakest links, and in an increasingly globalised world, a disease threat in one country is a threat to us all. Shared vulnerability means shared responsibility and therefore requires sharing of resources, and sharing of information.

8. We have learned the challenges of coordination. We have learnt to recognise the strengths of others, and the need to work in partnership when we don't have the capacity ourselves.

9. We have been reminded that market-based systems do not deliver on commodities for neglected diseases – endemic nor epidemic. But we have been encouraged by the desire of the scientific community, manufacturers and regulators to work together in this crisis to develop effective diagnostics, drugs and vaccines for Ebola.

10. Finally, we have learned the importance of communication - of communicating risks early, of communicating more clearly what is needed, and of involving communities and their leaders in the messaging.

What must we do?

11. We will intensify our advocacy with national authorities to keep outbreak prevention and management at the top of national and global agendas.

12. We will develop the capacity to respond rapidly and effectively to disease outbreaks and humanitarian emergencies. This will require a directing and coordinating mechanism to bring together the world's resources to mount a rapid and effective response. We commit to expanding our core staff working on diseases with outbreak potential and health emergencies so we will have at least [1,000] skilled staff always available at the three levels of WHO. We will also create surge capacity of teams of trained and certified staff so that we have at least [1000] additional staff available as a reserve force in the event of an emergency.

13. We will create a Global Health Emergency Workforce – combining the expertise of public health scientists, the clinical skills of doctors, nurses and other health workers, the management skills of logisticians and project managers, and the skills of social scientists, communication experts and community workers. This Global Health Emergency Workforce will be made up of

teams of trained and certified responders who can available immediately. A key principle must be to build capacity in countries, with training and simulation exercises.

14. We will establish a Contingency Fund to enable WHO to respond more rapidly to disease outbreaks. We must ensure adequate resources – domestic and international - are available BEFORE the next outbreak. We welcome the proposal to create a pandemic financing facility.

15. We will change our way of working. Disease outbreaks demand a command and control approach – very different from the consensus building culture of most of our work in global public health. We commit to clarifying our roles and responsibilities within health emergencies, and organize ourselves to deliver on these roles. We will develop new systems for human resources, planning, logistics, information management and other areas that are so critically important in health emergencies.

16. We will establish partnerships with other organizations such as OCHA, UNICEF and WFP and other partners, to create a scalable operational response capacity for large scale disease outbreaks

17. We will strengthen the International Health Regulations – the international framework for preparedness, surveillance and response for disease outbreaks and other health threats. We commit to strengthening our capacity to assess, plan and implement preparedness and surveillance. We will scale up our support to countries to develop the minimum core capacities to implement the IHR. We will establish mechanisms for independent verification of national capacity to detect and respond to disease threats.

18. We will develop expertise in community engagement in outbreak preparedness and response. We will emphasise the importance of community systems strengthening and work with partners to develop multidisciplinary approaches to community engagement , informed by anthropology and other social sciences.

19. We will communicate better. We commit to provide information on disease outbreaks and other health emergencies as they occur, rapidly and transparently. We will strengthen our capacity for risk communications and for community engagement.

We call on world leaders to take the following steps

20. First, take disease threats seriously. We don't know when the next major outbreak will come or what will cause it. But history tells us it will come.

21. Second, remain vigilant. This Ebola outbreak is far from over, and we must sustain our support to the affected countries until the outbreak is over, in the face of increasing complacency and growing fatigue. We must continue to maintain a high level of surveillance. Ebola has demonstrated its capacity to spread – it may do so again.

22. Third, engage to re-establish the services, systems and infrastructure which have been devastated in Guinea, Liberia and Sierra Leone. This recovery must be country-led, community-based, and inclusive – engaging the many partners who have something to contribute – bilateral and multilateral partners, national and international NGOs, the faith community, and the private sector.

23. Fourth, focus on prevention. This means investing domestically and internationally in essential public health systems for preparedness, surveillance and response, which are fully integrated and aligned with efforts to strengthen health systems, and included in the scope of development assistance for health. It means working across sectors – health and agriculture in particular. These resources will be substantial, but as the well-known aphorism goes, prevention is better (and less costly) than cure.

24. Fifth, be transparent in reporting. Accurate and timely information is the basis for effective action. Speedy detection facilitates speedy response and prevents escalation.

25. Sixth, invest in research and development for the neglected diseases with outbreak potential – diagnostics, drugs, and vaccines. This will require innovative financing mechanisms, and public-private partnerships.

26. Finally, hold us to account. We commit ourselves to ensuring that WHO is reformed and well positioned to play its rightful role in disease outbreaks and in global health security generally. Some have said the world needs a new organization to be created. We agree, and we want WHO to be that organization.

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CDC/MMWR/ACIP Watch [to 18 April 2015]
http://www.cdc.gov/media/index.html
:: **Ebola vaccine trial begins in Sierra Leone** - Press Release
TUESDAY, APRIL 14, 2015

The Centers for Disease Control and Prevention (CDC), in partnership with the Sierra Leone College of Medicine and Allied Health Sciences (COMAHS) and the Sierra Leone Ministry of Health and Sanitation (MoHS), is now enrolling and vaccinating volunteers for the Sierra Leone Trial to Introduce a Vaccine against Ebola (STRIVE). This study will assess the safety and efficacy of the rVSV-ZEBOV candidate Ebola vaccine among health and other frontline workers.

"A safe and effective vaccine would be a very important tool to stop Ebola in the future, and the frontline workers who are volunteering to participate are making a decision that could benefit health care professionals and communities wherever Ebola is a risk," said CDC Director Tom Frieden, M.D., M.P.H. "We hope this vaccine will be proven effective but in the meantime we must continue doing everything necessary to stop this epidemic —find every case, isolate and treat, safely and respectfully bury the dead, and find every single contact."

STRIVE will enroll about 6,000 health and other frontline workers. It will be conducted in Western Area Urban district, which includes Freetown, Western Area Rural district, and certain chiefdoms in Bombali, Port Loko, and Tonkolili districts. These study locations were selected because they have been heavily affected by the Ebola outbreak in the past few months.

"We are happy to be partnering with MoHS and CDC on this important study, which may help to prevent future cases of Ebola," said Mohamed Samai, M.B., Ch.B., Ph.D., acting Provost of COMAHS and the study's principal investigator. "It brings me hope and pride that my country can take from this devastating epidemic something that may benefit people around the world."

When participants enroll in the study, they will be assigned randomly to one of two timeframes for vaccination – either immediately or about six months later. All study participants will receive the vaccine and be followed closely for six months. The study will evaluate if and how well the vaccine worked by comparing rates of Ebola virus disease in those who are vaccinated to those who have not yet received the vaccine.

The rVSV-ZEBOV candidate vaccine uses a vesicular stomatitis virus carrying a non-infectious Ebola virus gene. The vaccine cannot cause Ebola virus disease but can potentially stimulate an immune response to protect against the disease. The vaccine was developed by the Public Health Agency of Canada's National Microbiology Laboratory and licensed to NewLink Genetics. In 2014, NewLink Genetics entered into a licensing and collaboration agreement with Merck to research, develop, manufacture, and distribute the rVSV-ZEBOV candidate vaccine. The vaccine has, and continues to be, studied in hundreds of people (as of March 26, 2015, more than 800 people) in Africa, Canada, Europe, and the United States. Results from early studies to date of the vaccine show an acceptable safety profile and indicate that the rVSV-ZEBOV candidate vaccine produces an immune response. The Biomedical Advanced Research and Development Authority is supporting the advanced development and manufacturing of the vaccine and is assisting CDC in conducting the clinical trial in Sierra Leone.

"We don't know whether this vaccine will be the Ebola prevention tool we're all eager for, but we hope that what we learn from STRIVE will help us save lives during this and future Ebola outbreaks," said Anne Schuchat, M.D., Director of CDC's National Center for Immunization and Respiratory Diseases.

Because it is not yet clear how much protection, if any, the rVSV-ZEBOV candidate vaccine may offer, health and other frontline workers who receive the vaccine should continue to take full preventive actions to protect themselves from Ebola, including proper training, focused protocols and procedures, and use of all recommended personal protective equipment.

:: **MMWR Weekly April 17, 2015 / Vol. 64 / No. 14**

- Measles — United States, January 4–April 2, 2015
- Ebola Transmission Linked to a Single Traditional Funeral Ceremony — Kissidougou, Guinea, -December, 2014–January 2015
- Assessment of Epidemiology Capacity in State Health Departments — United States, 2013

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Secretary-General, at World Bank Ebola Event, Calls for Sustained Assistance to 'Devastated' Countries

17 April 2015
SG/SM/16670

The Ebola epidemic remains a pressing challenge. Too many lives have been lost. Families, communities and nations have been devastated. Yet, over recent months, we have seen important progress. The Presidents and Governments of the affected countries have shown leadership and resolve. Communities have adopted safe and dignified methods of caring for the sick and burying the dead. And we have seen multilateralism at its best.

I thank the many Governments, local and international NGOs (non-governmental organizations) and, in particular, the brave doctors and nurses working on the front lines. As a result, we have seen a significant decline in new Ebola cases. Liberia has only recorded one case in the past two months. The outbreak has shrunk considerably to a narrow belt along coastal Guinea and Sierra Leone. Our marathon effort has been a success.

But the last mile may be the most difficult. We must strengthen surveillance, contact tracing and community engagement. And when we reach zero cases, we must maintain our response capacity for at least a year. To avoid having to face such an emergency again, I have established a High-Level Panel on Lessons Learned, chaired by President Jakaya Kikwete of Tanzania.

As we look forward, I call on the international community to support the recovery and peacebuilding efforts of Guinea, Liberia and Sierra Leone. These efforts must also recognize the fragility of these countries' transitions from past conflicts and instability to sustainable peace and development.

To generate the required resources, I am convening a high-level international conference in July, in New York. We must ensure that women, men and children have safe and affordable access to clinics, hospitals and schools. People need jobs and access to markets. Affected communities, the bereaved and orphans need support. People's faith in their Governments' ability to protect and serve them must be reinforced.

These are our building blocks to repair the fabric of communities, economies and societies torn apart by this terrible disease. I thank you and look forward to a productive discussion.

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World Bank [to 18 April 2015]
http://www.worldbank.org/en/news/all
Ebola: World Bank Group Provides New Financing to Help Guinea, Liberia and Sierra Leone Recover from Ebola Emergency
New GDP Estimates Show International Support Vital to Speed Recovery

WASHINGTON, April 17, 2015–The World Bank Group (WBG) announced today that it would provide at least US$650 million during the next 12 to 18 months to help Guinea, Liberia and Sierra Leone recover from the devastating social and economic impact of the Ebola crisis and advance their longer-term development needs. The new WBG pledge brings the organization's total financing for Ebola response and recovery efforts to date to US$1.62 billion.The additional funding announcement comes as the WBG releases new GDP estimates showing that the Ebola epidemic continues to cripple the economies of Guinea, Liberia and Sierra Leone. Estimated GDP losses for the three countries in 2015 rose to US$2.2 billion: US$240 million for Liberia, US$535 million for Guinea and US$1.4 billion for Sierra Leone…
Date: April 17, 2015

The African Development Bank Group [to 18 April 2015]
http://www.afdb.org/en/news-and-events/press-releases/
$300 million top-up from AfDB to support countries' Post-Ebola Recovery Programs
17/04/2015 - African Development Bank President Donald Kaberuka announced $300 million to support the national Post-Ebola Recovery program of Ebola-affected countries during the World Bank-IMF Spring Meetings in Washington.

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POLIO [to 18 April 2015]
Public Health Emergency of International Concern (PHEIC)

GPEI Update: Polio this week - *As of 15 April 2015*

Global Polio Eradication Initiative
[Editor's Excerpt and text bolding]
Full report: http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx
:: 12 April marked 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.
:: The Strategic Advisory Group of Experts on Immunization (SAGE) is meeting this week in Geneva, and will review the current epidemiological situation for polio and provide updates on readiness for oral polio vaccine withdrawal.
:: A 5-day nationwide polio immunization campaign targeting 5.8 million children began in Iraq on 12 April. It is over a year since the last case of polio had onset of paralysis in Iraq, and the new campaign aims to vaccinate every child under 5 throughout the country. Read more.
:: National Immunization Days are planned in Madagascar on 27 April to 1 May.

Keeping Iraq polio free: immunization campaign targets 5.8 million children

13 April 2015 – A 5-day nationwide polio immunization campaign targeting 5.8 million children under 5 years of age began in Iraq on Sunday 12 April. The campaign was marked by events held on 12 April in Baghdad, organized by the Ministry of Health, and on 13 April in Erbil organized by the Kurdistan regional Ministry of Health. Representatives of WHO and UNICEF attended both events with Rotary International attending the launch in Erbil. It is over a year since the last case of polio was reported in Iraq, and the new campaign aims to vaccinate every child under 5 throughout the country.

Iraq is one of the countries at highest risk for polio in the Region due to vulnerable populations living in multiple governorates. These include internally displaced persons, refugees, communities dwelling in slums and vast portions of the country where insecurity hinders health outreach activities. Vaccination teams will exert extra effort to reach children within these populations during the April campaign, with approximately 24 000 health workers set to conduct house-to-house visits.

"Action to contain and stop polio in Iraq has been strategic, concentrated and swift due to the strong commitment of the Government," said Dr Jaffar Hussain, WHO Representative to Iraq. "Keeping Iraq polio free has been a major priority for WHO and its partners over the past 12 months, and we are doing everything we can to maintain this great achievement," he said.

In the last year, a total of 13 subnational and national polio immunization campaigns have been conducted across the country to counter gaps in routine immunization services. Violence and insecurity in many parts of Iraq, damage to health facilities, and a shortage of health workers continue to create hurdles in reaching every child under 5 with oral polio vaccine (OPV).

"Population movement and shortfalls in routine immunization pose significant challenges for the polio eradication programme," Dr Hussain said. "However, with the committed leadership of the Ministry of Health, support from donors, and through strong collaboration among our partners, we have been able to consistently reach over 90% of all children for the last 9 campaigns since April 2014," he said.

Dr Hussain cautioned that certain high-risk governorates such as Baghdad, Karbala, Muthana and Babylon do not have uniformly high vaccination rates at the district level and thus require particular attention during the campaign…

Cameroon soldiers defy Boko Haram in polio battle
By Monde Kingsley Nfor
IRIN | 13 April 2015

MAROUA, 13 April 2015 (IRIN) - How do you vaccinate women and children against polio in remote areas prone to attack from Boko Haram militants? Arm the soldiers with vaccine.
This is exactly what has happened with great success in northern Cameroon.
Following a series of abductions last year by Boko Haram groups, military escorts have been joining vaccination drives in Cameroon's Far North Region to protect both local and international humanitarian workers.

In addition to acting as a security presence, officers, who normally patrol the frontlines and at-risk border communities, are also trained to administer polio vaccines – a tactic UNICEF says has been key to the successful campaign.

It allowed children in even the most dangerous areas to be vaccinated, as well as refugees the moment their families crossed the border.

"It is our role to protect the population and prevent them from whatever danger, including health threats," a Cameroonian commander, who wished to remain anonymous, told IRIN. "So we are simply adding more value to the work that we are already doing."

Military personnel also engaged with community leaders and radio stations to spread word of the importance of the vaccinations.

"In my locality, I make sure that my people get excited and look for the vaccinators," said a chief called Lamido from Guidiguis in far northern Cameroon…

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WHO & Regionals [to 18 April 2015]
:: **World Immunization Week: 24-30 April 2015** - ***Close the immunization gap***

World Immunization Week, which will be held from 24-30 April 2015, will signal a renewed global, regional, and national effort to accelerate action to increase awareness and demand for immunization by communities, and improve vaccination delivery services. This year's campaign focuses on closing the immunization gap and reaching equity in immunization levels as outlined in the Global Vaccine Action Plan, which is a framework to prevent millions of deaths by 2020 through universal access to vaccines for people in all communities.
Read more about the goals of the campaign
Africa - *Vaccination a gift for life*
24-30 April 2015
Americas - *Boost your power! Get vaccinated!*
25 April - 2 May 2015
Eastern Mediterranean - *Close the immunization gap*
24-30 April 2015
Europe - *Close the immunization gap*
24-30 April 2015

:: **Sixty-eighth World Health Assembly** - 18–26 May 2015

:: **Kenya: Closing the gap on pneumonia through immunization**
17 April 2015 – As World Immunization Week approaches, WHO reports on Kenya's successes preventing deaths from pneumonia among babies and young children through national implementation of the PCV-10 vaccine. A mother in Kilifi tells the story of her daughter's near-fatal episode of pneumonia and how her younger children were protected through immunization.
Read the story from Kenya

:: **Liberia succeeds in fighting Ebola with local, sector response**
14 April 2015 -- The story of how Montserrado Liberia, turned around an exponentially-growing Ebola outbreak is intriguing. WHO's team and national officials, aided by veterans from WHO's polio eradication group in India, decentralized the response, using quality management principles that empowered local teams and held them accountable for results. These local sector teams involved community members and used business best practices as well as an incident management system to improve surveillance, case finding, contact tracing, and overall management of key response activities.
Read the story from Liberia

:: The **Weekly Epidemiological Record (WER) 17 April 2015**, vol. 90, 16 (pp. 161–168) includes:
:: Eradication of yaws in India

:: **Global Alert and Response (GAR) – Disease Outbreak News (DONs)**
- 16 April 2015 - Middle East Respiratory Syndrome coronavirus (MERS-CoV) – Saudi Arabia
- 15 April 2015 - Human infection with avian influenza A(H7N9) virus – China

:: WHO Regional Offices
WHO African Region AFRO::
:: Implementing cervical cancer interventions key to save African women *- 13 April 2015*

WHO Region of the Americas PAHO
:: New PAHO/WHO network will monitor the health of women and newborns in Latin America and the Caribbean (04/16/2015)
:: PAHO's Director and Panama's Health Minister Raise Hopes for Reform of Country's Health Care (04/12/2015)
:: Development Bank of Latin America-CAF and PAHO/WHO join to help countries prepare for disease outbreaks (04/11/2015)

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

WHO European Region EURO
:: Time running out to reduce climate change threats to health 16-04-2015
:: Call for papers on intersectoral action for Public Health Panorama 14-04-2015
:: Water and sanitation: still a luxury for millions of Europeans 14-04-2015

WHO Eastern Mediterranean Region EMRO
:: WHO delivers life-saving health supplies into Yemen

16 April 2015, Cairo, Egypt -- The World Health Organization (WHO) has delivered critical life-saving medicines, and medical/surgical supplies to Yemen, where fighting has resulted in hundreds killed and thousands injured, and newly displaced up to 100 000 people since March. The shipment, which landed in Sana'a today, contains more than 17 tonnes of medicines and medical/surgical supplies for a total of 41 100 beneficiaries…

WHO Western Pacific Region

:: A month after Cyclone Pam, Vanuatu continues to face health challenges

PORT VILA, 15 April 2015 – Working with the Ministry of Health of Vanuatu and other partners, the World Health Organization (WHO) has made significant progress in addressing the health needs of the more than 160 000 people affected by Cyclone Pam. However, a month after the Category 5 storm ravaged the Pacific island country, many pressing health challenges remain.

Read the news release

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Sabin Vaccine Institute Watch [to 18 April 2015]

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

Dr. Roger Glass Receives 2015 Albert B. Sabin Gold Medal Award

WASHINGTON, D.C. — April 15, 2015 — The Sabin Vaccine Institute (Sabin) presented the 2015 Albert B. Sabin Gold Medal Award to Roger I. Glass, MD, PhD, director of the Fogarty International Center and associate director for international research at the National Institutes of Health. Dr. Glass was recognized for his many contributions to improving children's health worldwide, including novel scientific research for the prevention of gastroenteritis from rotaviruses and noroviruses.

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African Union and U.S. CDC Partner to Launch African CDC - Press Release

MONDAY, APRIL 13, 2015

Washington, DC –A Memorandum of Cooperation (MOC) signed today by U.S. Secretary of State John Kerry and Nkosazana Dlamini Zuma, M.B. Ch.B., chairperson of the African Union Commission, formalizes a collaboration between the African Union Commission and the U.S. Centers for Disease Control and Prevention in creating the African Centres for Disease Control and Prevention (African CDC).

"The West African Ebola epidemic reaffirmed the need for a public health institute to support African ministries of health and other health agencies in their efforts to prevent, detect, and respond to any disease outbreak," said CDC Director Tom Frieden, M.D., M.P.H. "This memorandum solidifies the commitment by the United States to advance public health across Africa and global health security."

The need for an African CDC was recognized at the African Union Special Summit on HIV and AIDS, TB, and Malaria in Abuja in July 2013. The concept has since moved through various stages of development, stakeholder review, and approval. The African CDC is slated to launch later this year with the establishment of an African Surveillance and Response Unit, which will include an Emergency Operations Center.

"The African Centres for Disease Control and Prevention (African CDC) will help African countries effectively monitor public health, respond to public health emergencies, address complex health challenges, and build needed capacity," Dr. Dlamini-Zuma said.

The African CDC Surveillance and Response Unit will provide technical expertise and response coordination during emergencies. Through the AU Support for Ebola Outbreak in West Africa (ASEOWA) mission, the African Union sent over 800 medical volunteers and public health responders to fight the Ebola epidemic in Guinea, Liberia, and Sierra Leone from September 2014 to February 2015. With the African CDC in place, these volunteers and others can be organized to form a deployable force ready to serve Member States during future health emergency responses on the continent.

The African CDC will identify five Regional Collaborating Centers in the five AU geographic regions to work with the African CDC Coordinating Center in Addis Ababa, Ethiopia. Field epidemiologists will be among the technical staff supporting both the Regional Collaborating Centers and the African CDC Coordinating Center. The field epidemiologists will be responsible for disease surveillance, investigations, analysis, and reporting trends and anomalies.

"The U.S. CDC applauds the African Union and Member States in their leadership of this historic initiative," said Tom Kenyon, M.D., M.P.H., director of the CDC's Center for Global Health. "This is a landmark event in African ownership of improving health across the continent. The U.S. CDC looks forward to engaging in this partnership for many years to come."

Through the MOC, the U.S. CDC will provide technical expertise for the African CDC Surveillance and Response Unit, as well as advise African CDC leadership in strategic planning for future development. Specifically, two public health experts from the U.S. CDC will be co-located at the African Union to serve as long-term technical advisors to the African CDC. Additionally, the U.S. CDC will support fellowships for 10 African epidemiologists to help staff the African CDC Coordinating and Regional Collaborating Centers.

The African CDC will seek ongoing collaboration of other public health entities across the African continent and globally to elevate health outcomes for all African citizens. Partners may assist by implementing activities, supporting the establishment of the Regional Collaborating Centers, advising the African CDC leadership and staff, or by providing technical assistance. African CDC partners may also strategically support professional associations to coordinate programmatic activities across the public health domains.

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USAID [to 18 April 2015]
http://www.usaid.gov/news-information/press-releases

New Global Health Approach to Reach Millions More People with Lifesaving Medicines

April 17, 2015

WASHINGTON, D.C. - The U.S. Agency for International Development (USAID) announced today a new approach to purchasing and distributing life-saving medicine and health supplies. USAID will use data analytics and innovative tools to drive-down the price of medicines and increase delivery speed. As funding for global health has remained relatively stable over the past several years, this new approach will enable USAID to reach millions more patients with the same amount of resources…

…A well-functioning health care delivery system requires a strong supply chain. Without one, antiretroviral medicines, insecticide-treated bed nets, condoms, contraceptives, vaccines, and other health supplies will not reach those most in need in a secure, timely, and cost-efficient

manner. For the first time, the new Global Health Supply Chain Program consolidates all USAID supply purchasing and distribution projects across the health sector, creating one streamlined supply chain.

By incorporating lessons learned from a decade of global health supply chain management and from the commercial sector, USAID will continue to drive savings in procurement such as the one we are announcing today, ensure timely delivery of essential health commodities, and strengthen country-led health supply chains through the following methods:

:: Requiring that implementing partners cannot charge a fee on the cost of purchasing medicines and health supplies, which will account for approximately 85% of the money USAID spends through the new approach. In addition, no overhead will be applied on the cost of medicines and health supplies.

:: Partnering with other donors, multilateral organizations, and private foundations to leverage our joint purchasing power in negotiations with suppliers to drive down the prices of medicine and health supplies.

:: Switching from brand-name to high-quality generic medicine and health supplies.

:: Using innovative business intelligence and analytics to forecast and predict when country stockpiles run low to avoid gaps in delivery and ensure emergencies are averted.

Improving ability to forecast and plan helps USAID purchase in bulk, further driving down the cost of medicines and health supplies.

Through the new approach of USAID's Global Health Supply Chain Program, the Agency expects to spend up to $10.5 billion over eight years through a broad group of partners including Chemonics International, IntelliCog, Remote Medical International, FHI 360, IBM, Kuehne+Nagel, and others to help save and improve lives in more than 50 developing countries worldwide.

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WHO calls for increased transparency in medical research

Note for the media

14 APRIL 2015 | GENEVA - WHO today issued a public statement calling for the disclosure of results from clinical trials for medical products, whatever the result. The move aims to ensure that decisions related to the safety and efficacy of vaccines, drugs and medical devices for use by populations are supported by the best available evidence.

"Our intention is to promote the sharing of scientific knowledge in order to advance public health," said Dr Marie-Paule Kieny, WHO Assistant Director-General for Health Systems and Innovation. "It underpins the principal goal of medical research: to serve the betterment of humanity."

"Failure to publicly disclose trial results engenders misinformation, leading to skewed priorities for both R&D and public health interventions," said Dr Kieny. "It creates indirect costs for public and private entities, including patients themselves, who pay for suboptimal or harmful treatments."

Unreported trials lead to misinformation

For example, in a study that analysed reporting from large clinical trials (more than 500 participants) registered on ClinicalTrials.gov and completed by 2009, 23% had no results reported. These unreported trials included nearly 300 000 participants. Among clinical trials of vaccines against 5 diseases registered in a variety of databases between 2006-2012, only 29% had been published in a peer-reviewed journal by the WHO recommended deadline of 24 months following study completion.

"We need the collaboration of all these actors to enforce transparency in their jurisdictions in order to increase the benefits and decrease the risks for patients, clinical trial volunteers and the general public," concluded Dr Kieny.

International Clinical Trials Registry Platform furthers transparency

WHO's call for disclosure includes older unreported clinical trials, the results of which may still have an important bearing on scientific research today. WHO also reaffirms the need for all clinical trials to be registered on a WHO primary clinical trial registry so that they can be accessible through the International Clinical Trials Registry platform. This will ensure transparency as to which clinical trials have occurred, and allow verification of compliance with public disclosure requirements.

The recent WHO move expands on a 2005 call for all clinical trials to be registered, and the subsequent establishment of the International Clinical Trials Registry Platform. This registry platform regularly imports trial records from ClinicalTrials.gov, ISRCTN registry, EU Clinical Trials Register, Australia New Zealand Clinical Trial Registry, Pan African Clinical Trial Registry and Clinical Trial Registries from China, India, Brazil, Republic of Korea, Cuba, Germany, Iran, Japan, Sri Lanka, The Netherlands and Thailand.

PATH [to 18 April 2015]
http://www.path.org/news/index.php
Announcement - Posted April 14, 2015.

Statement from PATH in support of WHO call for public disclosure of clinical trial results

New guidelines part of a growing movement to increase transparency and availability of clinical trial results

PATH commends the World Health Organization (WHO) statement calling for greater transparency and public availability of clinical trial results. Issued today in Geneva, the statement seeks to improve the regularity and timeliness of results reporting and urges action across jurisdictions to enact policies that encourage increased results reporting. With this statement, WHO joins a growing list of donors, regulators, and other stakeholders who are requiring or encouraging increased transparency of clinical trial results.

Building on WHO's 2005 call to register all interventional clinical trials and its establishment of the International Clinical Trial Registry Platform (ICTRP), this statement goes a step further to expand access to results, whether they are positive, negative, or incomplete. WHO called for reporting of results for all studies both through publication in peer-reviewed, preferably open access, journals and by updating the results section of the primary clinical trial registry within specific timelines.

Recent evaluation has shown that while progress has been made in increasing the registration of clinical trials, the results of many trials are still not widely available. WHO's statement draws particular attention to the need to report negative and inconclusive trial results, which continue to lag significantly behind positive trial results in terms of reporting and publication. In addition, the WHO statement underscores the importance of reporting older, previously unpublished clinical trial results.

PATH shares WHO's view that increased reporting of trial results will foster more informed regulatory and public health decision-making, expand access to information among clinical trial patients and the scientific community, and improve resource allocation for both developing and financing health interventions.

PATH's portfolio of innovative health solutions—including drugs, vaccines, and medical devices—relies on the openness and accessibility of clinical trial results to partners and

communities around the world. As we work together to tackle the most challenging health problems, all communities, including those where the disease burden is highest, should have access to clinical trial results. PATH applauds the public- and private-sector research leaders paving the way to make clinical trial results publicly available and recognizes the positive impact this has on bringing health within reach for everyone.

European Vaccine Initiative Watch [to 18 April 2015]
http://www.euvaccine.eu/news-events
EURIPRED: Call for application for Free Services *Deadline: 12 May 2015*
13 April 2015
European Research Infrastructures for Poverty Related Diseases (EURIPRED)
EURIPRED facilitates and support translational research for poverty related diseases, such as HIV, TB, malaria and hepatitis. Today the third call for application for FREE Services (for European scientists) is launched. The free services are:
:: Access to biological materials and reference reagents/ standards – NIBSC - CFAR
:: Access to vaccine adjuvant & formulation studies – VFL - UNIL
:: Access to microarray facility for screening & evaluation – JPT
Please inform us if you have other wishes or requests, not mentioned in the above lists. Application for free services will be selected under a peer-reviewed process. Only European user groups (from EU Member States or Associated States) can apply for the free services, and only to EURIPRED Service infrastructures outside their own country. For scientists based in countries outside the EU Member States or its Associated States, access is subject to a range of charges according to the service requested (see also Eligibility Criteria)…

DCVMN / PhRMA / EFPIA / IFPMA / BIO Watch [to 18 April 2015]
:: **Merck Chairman and CEO Kenneth C. Frazier Becomes PhRMA Board Chairman**
Washington, D.C. (April 16, 2015) — Today, Kenneth C. Frazier, chairman and chief executive officer (CEO) of Merck & Co., Inc., was elected chairman of the Board of the Pharmaceutical Research and Manufacturers of America (PhRMA). At today's Board meeting, PhRMA's president and CEO John J. Castellani announced that he will be retiring effective January 1, 2016…

NIH Watch [to 18 April 2015]
http://www.nih.gov/news/health/apr2015/niaid-01.htm
:: Whitescarver steps down as director of NIH's Office of AIDS Research
April 15, 2015 — He led the office since 2000.
:: NIH, South African Medical Research Council award $8 million in HIV, TB grants
April 13, 2015 — Two- and five-year awards are first issued under joint program.

::::::

Industry Watch [to 18 April 2015]
No new digest content identified.

UNICEF Watch [to 18 April 2015]
No new digest content identified.

GAVI [to 18 April 2015]
http://www.gavialliance.org/library/news/press-releases/
No new digest content identified.

Global Fund [to 18 April 2015]
http://www.theglobalfund.org/en/mediacenter/newsreleases/
No new digest content identified.

BMGF (Gates Foundation) [to 18 April 2015]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

IVI Watch [to 18 April 2015]
http://www.ivi.org/web/www/home
No new digest content identified.

FDA Watch [to 18 April 2015]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
No new digest content identified.

European Medicines Agency Watch [to 18 April 2015]
http://www.ema.europa.eu/ema/
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

Book Review: Medical Miracles
children who are the victims of their parents' misplaced faith.
By William Bynum
WSJ, April 10, 2015
Bad Faith
By Paul A. Offit
Basic, 253 pages, $27.99
"…in "Bad Faith," but he forcefully demonstrates that the children of people in faith-healing groups have higher mortality rates than those whose parents have their children vaccinated and seek medical help when they fall ill. Dr. Offit, a pediatrician at the University of Pennsylvania School of Medicine, is primarily concerned with the health of children who are the victims of their parents' misplaced faith…

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 4, 2015
http://www.tandfonline.com/toc/uajb20/current

Ideology and Microbiology: Ebola, Science, and Deliberative Democracy
Free access
DOI:
10.1080/15265161.2015.1023119
Joseph J. Finsa*
pages 1-3
[No abstract]

Selecting the Right Tool For the Job
Free access
DOI:10.1080/15265161.2015.1010993
Arthur L. Caplana*, Carolyn Plunkettb & Bruce Levinc
pages 4-10
Published online: 09 Apr 2015
Abstract
There are competing ethical concerns when it comes to designing any clinical research study. Clinical trials of possible treatments for Ebola virus are no exception. If anything, the competing ethical concerns are exacerbated in trying to find answers to a deadly, rapidly spreading, infectious disease. The primary goal of current research is to identify experimental therapies that can cure Ebola or cure it with reasonable probability in infected individuals. Pursuit of that goal must be methodologically sound, practical and consistent with prevailing norms governing human subjects research. Some maintain that only randomized controlled trials (RCTs) with a placebo or standard-of-care arm can meet these conditions. We maintain that there are alternative trial designs that can do so as well and that sometimes these are preferable to RCTs.
…CONCLUSION
If the goal of conducting trials in epidemic ravaged West Africa is to rapidly find an intervention that cures the infected and blunts the epidemic, then canonical RCT designs are not the only or even the best choice. The World Health Organization, Doctors without Borders, and other partners who coordinate trials on experimental agents agree (see Boseley 2014). There are practical reasons why placebo or SOC-controlled trials will be difficult if not impossible to undertake. It is particularly important to recognize that testing against the null hypothesis is neither appropriate nor necessary at this point in an out-of-control lethal epidemic. Instituting alternative clinical trial designs can provide useful information for the elimination or selection of

prospective therapies. And that is what morally we owe those who are dying or at grave risk in environments where they have no other realistic means of survival.

This issue includes a number of Open Peer Commentaries on this Target Article and the author's response below:
The Perfect Must Not Overwhelm the Good: Response to Open Peer Commentaries on "Selecting the Right Tool For the Job"
Free access
DOI:10.1080/15265161.2015.1023118
Arthur L. Caplana*, Carolyn Plunkettb & Bruce Levinc
pages W8-W10
Published online: 09 Apr 2015

We thank each of the peer commentators for their contributions. The key points they raise fall into five broad but interrelated categories of questions: (1) What are the appropriate goals of research on treatments for Ebola virus disease (EVD)? (2) Must we test the null hypothesis to achieve those goals? (3) What treatments and/or therapies should be included in trials? (4) What technical aspects of statistical design, implementation, and data analysis are most relevant to trials? (5) How should scarce research resources best be allocated to achieve the goal of reducing mortality from EVD?

Answers to questions 1 and 2 highlight strong disagreements between our critics and ourselves. We stated at the outset of our article (Caplan, Plunkett, and Levin 2015) that

The guiding methodologic question of clinical trials … in an epidemic that has spread out of control is not to test a "null hypothesis" that nothing works in carefully controlled circumstances but, rather, to assess among potentially promising agents, some of which have proven safety records, which stands the best chance of working. (5)

By "working" we mean, as Degeling and colleages say, working within "the socio-cultural, economic and political conditions in which it is likely to be used" (Degeling, Johnson, and Mayes 2015, 43). Many of our critics do not agree that this is an appropriate goal much less the appropriate goal. Dawson (2015) claims that the guiding question of research should be, "Can a new agent improve on our best treatment practices or not?" Similarly, Rid (2015) says, "If [Caplan and colleagues' proposed randomized selection trial does] not answer the relevant question, namely, whether the experimental treatments add something to supportive care, their other advantages matter little." Nelson and colleagues (2015) in various comments are in agreement with Dawson and Rid. All agree that a traditional randomized controlled trial (RCT) with a standard-of-care (SOC) control arm is the most expedient, and most ethical, way of proceeding.

We termed this strident defense of RCTs the "hypothesis test reflex." To some of our critics, especially those writing from the perspective of the Food and Drug Administration (FDA), which has long been exceedingly wary of any other goal and method for testing novel drugs (Kurihara 2014) it appears to be beyond question that the primary (if not the only) goal of "research" with EVD patients must be to test whether an experimental treatment is safe and more effective than what is currently available to a high degree of certainty. Given that perspective, an alternative trial design that does not accomplish that goal cannot be deemed valid research,

because it does not answer the stipulated "relevant question," and, insofar as it has "little chance of providing interpretable efficacy and safety data," yields an approach the critics believe to be useless and thus unethical.

There is a tautology in this line of reasoning: By definition, to qualify as research any research must test the null hypothesis; therefore, if a design such as a randomized selection trial (RST) does not do that, it must be faulty because it does not test the null hypothesis. We do not dispute the fact that an RST does not test the null hypothesis; we simply do not agree that our critics' assumptions about the goals of research are of paramount importance in an uncontrolled, highly lethal epidemic. Thus, their proposed trials do not comprise the only valid design to meet what we think are more important goals—trying to save lives quickly while learning.

Given our goal—to assess among potentially promising interventions which one stands the best chance of working in West Africa in the midst of a deadly, fast moving epidemic—it is legitimate to start from the premise that the null hypothesis is false and get down to the business of finding the best agent to use. It also makes sense to follow our course since it is not clear local populations will accept RCTs—a point our critics fail to adequately engage (Adebamowo et al. 2014; Kupferschmidt and Cohen 2015).

In contrast to our critics, we think RSTs provide a better way to answer question 3: What treatments and/or therapies should be included in trials? Our answer is this: any treatment, therapy or intervention, or combination thereof, that stands a chance at being effective in the field, with the qualification that it has passed basic safety testing. We are sensitive to the fact that only 10% of drugs that enter Phase I safety testing are ultimately approved (Hay et al. 2014). Several commentators cited this fact in response to our claim that it is "reasonably plausible that at least some candidates are better than available SOC." Though several commentators insist we must, we do not assume that interventions tested in the RST have "high ex ante probability" of being effective (Millum 2015) or will perform like "Babe Ruth" (Rid 2015). The interventions need only have a plausible biologic explanation for their proposed efficacy, appear to be safe in humans, be deliverable in the field, and be acceptable to potential recipients. Our assumption for initiating a trial is quite modest: At least one biologically plausible, safety-tested intervention may provide some benefit over the actual standard of care in most Ebola treatment units (ETUs). The morally essential goal is to rapidly identify the most promising agents under field conditions in trials that the population will find acceptable (Caplan 2015).

Among the proposed interventions that would be tested in an RST is "best available supportive care" (BASC), defined in Annette Rid's piece as fluid replacement, broad-spectrum antibiotics, malaria treatment, and antipyretics. Contrary to our critics, we assume neither that BASC is already an effective treatment nor that it is widely available. It is one option among others, which may—or may not—be more effective than rival unproven or experimental treatments.

None of the writers appear to question that BASC is already an effective treatment compared to what the actual available level of supportive care was during the horrible outbreak in much of West Africa during the latter months of 2014 and continuing even today in parts of the region. We don't hear the regulators who criticize us while continuing to plump for RCTs (Nelson et al. 2015) calling for a traditional RCT to test whether BASC is actually better than what was or is

now available in most treatment locations in West Africa. Why then must we be so completely agnostic as to whether some other promising treatments such as convalescent blood products, monoclonal antibodies, or antiviral medicines might not work better than the care actually deliverable in most locations in the most impacted nations in West Africa? There is already preliminary evidence that favipiravir may reduce mortality by half in patients with low to moderate levels of Ebola virus, perhaps from 30% to 15% (Fink 2015), though we do not know what level of care study participants received in addition to the drug because study data have not yet been made available. Researchers are hopeful the easy-to-administer and readily available drug will also provide a benefit to children with EVD; the trial is set to expand to include children older than 1 year (Bouazza et al. 2015).

If one takes for granted, as our critics appear to do, that BASC is effective (compared to existing care in West Africa) and one further assumes that such care is widely available due to strengthened worldwide support, education of local populations, training of caregivers, and augmented distribution networks, then it should be given to all patients. In that case, we believe still that an RST should then be undertaken to determine the most promising additions to such care. One feature of selection procedures, which none of our commentators mention, is that if there were truly no differences in efficacy among all the candidate adjuvants to best available supportive care, then it would hardly matter which one or ones were selected. We would be free to select among the options based on practical concerns like deliverability, availability of health care workers, infrastructure, cost, local values, and so on. If all of them turned out actually to be worse than best available supportive care alone, this fact would become self-evident in short order as the nationwide case-fatality rates would fail to drop.

Unfortunately, we do not believe that BASC as defined by Rid is generally feasible, yet, throughout West Africa. Louis (2015) reminds us that the elements of BASC are still up for debate. Even intravenous rehydration and personal protective equipment may be unavailable in certain regions for practical reasons, as Waldman and Nieburg (2015) point out. Also, more advanced elements of supportive care such as kidney dialysis, biochemical monitoring, or ventilators, which are widely available in the United States and elsewhere in the developed world, are currently not a reality in West Africa. As such, BASC ought to be treated in West Africa like other experimental treatments whose efficacy appears promising but the value of whose widespread and rapid distribution is uncertain. Seen that way, evidence speaking to the regulator's question of interest would become available even in an RST.

But to return to our main points, (i) even if BASC does reduce mortality from 70% to 30%, a treatment with a 30% chance of death is still a dire prospect to ask a patient to consent to, and (ii) we don't think the primary goal of interventions should be to prove that something is better than BASC. The price to be paid for the holy grail of $p < 0.05$ is too high to those sick and dying (Caplan et al. 2015). We need to promptly identify the available treatments that will best save lives with useful evidence—the perfect ought not be the enemy of the good in the middle of a deadly epidemic.

Rid (2015) goes to some length to make our illustrative schoolyard baseball analogy work for null hypothesis testers. To extend the metaphor a bit more than she does, a professional baseball manager can surely conduct research on whether potential draftees may or may not improve the team's strength, but let us not forget that the first priority is to quickly select those

whom the manager thinks, based on incomplete evidence, are the best available players during the draft period.

Louis (2015), in addressing the fourth question, urges us to "expand the toolkit" rather than dwelling on differences of modes of statistical inference. We couldn't agree more, though it would still be prudent to keep the trial designs simpler rather than more complex. Differences in statistical approaches and randomization schemes pale in importance compared to the goals of quickly trying interventions. In response to various comments on the technical aspects of statistical design, implementation, and data analysis, we recognize that we did not include an extended explanation of particular design details, in part because selection procedures have been known for over half a century and adaptive sequential selection procedures have also been studied for more than three decades. Our hope is that by discussing the issues, suggesting alternative randomized approaches in broad brush, and responding to our critics' key points, we may help to broaden a discussion of the technical requirements for the kind of testing that ought to be done during epidemic crises and other humanitarian emergencies.

Several commentators, notably Millum, Degeling and colleagues, and Waldman and Nieburg, raised the fifth question: How should scarce research resources best be allocated to achieve the goal of reducing mortality from EVD? Millum says, "[Caplan and colleagues'] approach might make sense if there were no other ways in which the limited resources expended on distributing experimental therapies could be used to combat Ebola." Waldman and Nieburg claim, "Socioanthropological research into issues like these may actually save more lives in the long run than attempts to find optimal treatments." Degeling and colleagues say, "The development of an effective therapy for EVD is only part of the 'the job' that needs to be completed." Ideally, there would be sufficient research funding to tackle Ebola from many angles.

We agree. Research into better personal protective equipment, cultural practices, and environmental issues, among other contributors to the current Ebola epidemic, would help reach the desirable goal of saving more lives and controlling this outbreak. But examining drug development makes sense too. It is a strategy worth pursing if we move away from the "hypothesis test reflex." In deciding what is the best, most equitable way to attack epidemic diseases, trial design issues are crucial in deciding how best to allocate available resources. We thank Dawson for reminding us of lessons learned from early AIDS trials. The proposed RST, if implemented, would be the first of possibly many steps toward finding a "slam dunk" treatment for Ebola, much as early AIDS trials were the first of many steps toward modern, highly effective, combination antiretroviral treatments. As we argue, the RST balances scientific rigor with ethical and practical concerns of providers, governmental and nongovernmental agencies, and local community members.

The issues about what type of trials to conduct are not going to go away. As the current Ebola outbreak subsides patients will (thankfully) become increasingly more difficult to find, let alone recruit to a traditional RCT. Until a successful preventative solution can be found, we must act as quickly as we can to find what best treats patients during the next outbreak and the next humanitarian emergency.

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
[Reviewed earlier]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 18 April 2015)
[No new relevant content]

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 18 April 2015)
Research article
Medical student's attitude towards influenza vaccination
Birthe A Lehmann, Robert Ruiter, Sabine Wicker, Gretchen Chapman, Gerjo Kok BMC Infectious Diseases 2015, 15:185 (15 April 2015)
Abstract (provisional)
Background
Influenza vaccination is recommended for all healthcare personnel (HCP) and most institutions offer vaccination for free and on site. However, medical students do not always have such easy access, and the predictors that might guide the motivation of medical students to get vaccinated are largely unknown.

Methods
We conducted a cross-sectional survey study among pre-clinical medical students in a German University hospital to assess the social cognitive predictors of influenza vaccination, as well as reasons for refusal and acceptance of the vaccine.
Results
Findings show that pre-clinical medical students have comparable knowledge gaps and negative attitudes towards influenza vaccination that have previously been reported among HCP. Lower injunctive norms and higher feelings of autonomy contribute to no intention to get vaccinated against influenza, while a positive instrumental attitude and higher feelings of autonomy contribute to a high intention to get vaccinated. The variables in the regression model explained 20% of the variance in intention to get vaccinated.
Conclusions
The identified factors should be addressed early in medical education, and hospitals might benefit from a more inclusive vaccination program and accessibility of free vaccines for their medical students.

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 18 April 2015)
[No new relevant content]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 18 April 2015)
[No new relevant content]

BMC Public Health
http://www.biomedcentral.com/bmcpublichealth/content
(Accessed 18 April 2015)
Research article
Vaccination Week in the Americas, 2011: an opportunity to assess the routine vaccination program in the Bolivarian Republic of Venezuela
Daniel Sánchez, Samir V Sodha, Hannah J Kurtis, Gladys Ghisays, Kathleen A Wannemuehler, M Danovaro-Holliday, Alba Ropero-Álvarez BMC Public Health 2015, 15:395 (17 April 2015)
Abstract
Background
Vaccination Week in the Americas (VWA) is an annual initiative in countries and territories of the Americas every April to highlight the work of national expanded programs on immunization (EPI) and increase access to vaccination services for high-risk population groups. In 2011, as part of VWA, Venezuela targeted children aged less than 6 years in 25 priority border municipalities using social mobilization to increase institution-based vaccination. Implementation of social communication activities was decentralized to the local level. We conducted a survey in one border municipality of Venezuela to evaluate the outcome of VWA 2011 and provide a snapshot of the overall performance of the routine EPI at that level.
Methods

We conducted a coverage survey, using stratified cluster sampling, in the Venezuelan municipality of Bolivar (bordering Colombia) in August 2011. We collected information for children aged <6 years through caregiver interviews and transcription of vaccination card data. We estimated each child's eligibility to receive a specific vaccine dose during VWA 2011 and whether or not they were actually vaccinated during VWA activities. We also estimated baseline vaccination coverage, timeliness and 95% confidence intervals (CI), and used chi-square tests to compare coverage across age cohorts, taking into account the sampling design.
Results
We surveyed 839 children from 698 households; 93% of children had a vaccination card. Among households surveyed, 216 (31%) caregivers reported having heard about a vaccination activity during April or May 2011. Of the 528 children eligible to receive a vaccine during VWA, 24% received at least one dose, while 13% received all doses due. Overall, baseline coverage with routine vaccines, as measured by the survey, was >85%, with a few exceptions.
Conclusion
Low levels of VWA awareness among caregivers probably contributed to the limited vaccination of eligible children during the VWA activities in Bolivar in 2011. However, vaccine coverage for most EPI vaccines was high. Additionally, high vaccination card availability and high participation in VWA among those caregivers aware of it in 2011 suggest public trust in the EPI program in the municipality. Health authorities have used survey findings to inform changes to the routine EPI and better VWA implementation in subsequent year

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 18 April 2015)
Research article
Vaccine storage and cold chain monitoring in the North West region of Cameroon: a cross sectional study
Martin Yakum, Jerome Ateudjieu, Ebile Walter, Pierre Watcho BMC Research Notes 2015, 8:145 (14 April 2015)
Abstract
Background
The cold chain must be monitored continuously in order to guarantee vaccines' quality. From field reports and previous studies, cold chain monitoring for expanded program on immunization (EPI) is still not satisfactory in Cameroon. This study was conducted to evaluate the availability and functioning of cold chain equipment as well as knowledge.
Results
It was a cross-sectional study involving a multistage sampling. 3 urban and 5 rural districts were selected randomly from the 19 health districts of the North West region. In each district all the health facilities taking part in the EPI were targeted. Data were collected using a questionnaire administered face to face to health personnel and with an observational grid to assess availability, functioning, and monitoring of cold chain equipment and power supply. The data were analyzed using the epi-info software. A total of 70 health facilities were contacted and 65(88.6%) of them included in the study. Fifty-three (81.5%) out of 65 health facilities had at least one functional vaccine refrigerator. The national guideline of EPI was not present in 21(33.9%) health facilities. Temperature chart was complete/correctly filled in 25(50.0%) of the 50(96.2%) facilities having it. About 14 (26.9%) of the health facilities record at least one

abnormal temperature during the last 2 months following data collection. Seventeen (28.3%) personnel did not know the correct vaccine storage temperature.
Conclusion
The availability of vaccine storage equipment for EPI is acceptable in the North West Region of Cameroon but the capacity of those in charge to properly monitor it in all health facilities is still limited. To ensure that vaccines administered in the North West Region are stored at the recommended temperature, all District Health Services should train and regularly supervise the health personnel in charge of cold chain monitoring.

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

British Medical Journal
18 April 2015(vol 350, issue 8004)
http://www.bmj.com/content/350/8004
[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 9 May 1, 2015
http://cid.oxfordjournals.org/content/current
Editorial Commentary: Setting National Targets for Antibiotic Use
Joshua P. Metlay
Author Affiliations
Division of General Internal Medicine, Massachusetts General Hospital, Boston
(See the Major Article by Hicks et al on pages 1308–16.)

The recognition that antibiotic use invariably leads to the emergence of antibiotic resistance dates back to the earliest uses of these drugs. However, a series of events over the last few decades called attention to the societal problem of antibiotic overuse and the need for interventions to address it. These events included the release of an Institute of Medicine report on emerging infections, the launching of professional organizations including the Alliance for the Prudent Use of Antibiotics, and the creation of an interagency task force on antimicrobial resistance that linked the Centers for Disease Control and Prevention (CDC), US Food and Drug Administration, and National Institutes of Health (along with other agencies) to reduce the threat of emerging resistance and develop a public health action plan [1, 2]. Safeguarding the future availability of antibiotic drugs by restricting their use now has been a consistent theme of these efforts and was highlighted in a recent CDC report summarizing the burdens and threats

posed by antibiotic-resistant organisms [3]. Given the length of time we have been fighting the battle against antibiotic overuse, a national update on how we are doing seems long overdue. In this issue of Clinical Infectious Diseases, Hicks and colleagues from the CDC report on population rates of outpatient antibiotic use …

US Outpatient Antibiotic Prescribing Variation According to Geography, Patient Population, and Provider Specialty in 2011

Clin Infect Dis. (2015) 60 (9): 1308-1316 doi:10.1093/cid/civ076

Lauri A. Hicks, Monina G. Bartoces, Rebecca M. Roberts, Katie J. Suda, Robert J. Hunkler, Thomas H. Taylor, Jr, and Stephanie J. Schrag

Healthcare providers prescribed 842 prescriptions per 1000 persons in 2011. The most commonly prescribed individual antibiotic agent was azithromycin. Family practitioners prescribed the most antibiotic courses (24%). The prescribing rate was higher in the South than the West.

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 18 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 18 April 2015)

[No new relevant content]

Current Opinion in Infectious Diseases

April 2015 - Volume 28 - Issue 2 pp: v-v,117-198

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Volume 21, Number 4—April 2015
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Volume 20, Issue 15, 16 April 2015
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Special issue on HIV in MSM: Part II
This issue presents the second part of a series of articles on HIV and STI epidemiology, prevention and control among MSM in Europe

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March 2015 | Volume 3 | Issue 1
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April 2015; Volume 34, Issue 4
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Volume 16, Issue 2 December 2014
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Volume 30 Issue 3 April 2015
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Volume 7 Issue 2 March 2015
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Special issue: Digital methods in epidemiology
[Reviewed earlier]

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Volume 44 Issue 1 February 2015
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April 2015 Volume 33, p1
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Volume 40, Issue 2, April 2015
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April 2015, Volume 69, Issue 4
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Volume 10, Issue 3, 2014
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January-March 2015 Volume 7 | Issue 1 Page Nos. 1-50
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Volume 26, Number 1, February 2015
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Volume 17, Issue 2, April 2015
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39 articles covering these themes in different ethic and nationals contexts
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Volume 13, Issue 1, 2015
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[Reviewed earlier]

Journal of Infectious Diseases
Volume 211 Issue 9 May 1, 2015
http://jid.oxfordjournals.org/content/current
Raising Expectations For Subunit Vaccine
John T. Schiller and Douglas R. Lowy
Author Affiliations
Laboratory of Cellular Oncology, Center for Cancer Research, National Cancer Institute, Bethesda, Maryland
Abstract
Multidose regimens are recommended for all prophylactic subunit vaccines. Recent findings from clinical trials of an human papillomavirus virus-like particle vaccine suggest that it may be possible to develop effective single-dose subunit vaccines. The broad implications of these findings are discussed, and the importance of antigen structure and adjuvant in achieving this goal is considered. In conclusion, we argue for the inclusion of single-dose arms in future trials of vaccines, especially if they are based on induction of antibodies by virus-like displayed antigens

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Spring 2015 Volume 43, Issue 1 Pages 6–166
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[Reviewed earlier]

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April 2015, Volume 41, Issue 4
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[Reviewed earlier]

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

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April 2015; 64 (Pt 4)
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[New issue; No relevant content identified]

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Volume 4 Issue 1 March 2015
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Volume 36, Issue 1 (February 2015)
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Journal of the Royal Society – Interface
06 May 2015; volume 12, issue 106
http://rsif.royalsocietypublishing.org/content/current[Reviewed earlier]
[Reviewed earlier]

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April 2015, volume 89, issue 7
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Apr 18, 2015 Volume 385 Number 9977 p1477-1590
http://www.thelancet.com/journals/lancet/issue/current
Articles
Safety and immunogenicity of Ebola virus and Marburg virus glycoprotein DNA vaccines assessed separately and concomitantly in healthy Ugandan adults: a phase 1b, randomised, double-blind, placebo-controlled clinical trial
Hannah Kibuuka, MMed, Nina M Berkowitz, MPH, Monica Millard, MPH, Mary E Enama, MA, Allan Tindikahwa, MPH, Arthur B Sekiziyivu, MSc, Pamela Costner, BSN, Sandra Sitar, MS, Deline Glover, BS, Zonghui Hu, PhD, Gyan Joshi, MPH, Daphne Stanley, MS, Meghan Kunchai, MPH, Leigh Anne Eller, PhD, Robert T Bailer, PhD, Richard A Koup, MD, Gary J Nabel, MD, John R Mascola, MD, Nancy J Sullivan, PhD, Barney S Graham, MD, Mario Roederer, PhD, Nelson L Michael, MD, Merlin L Robb, MD, Dr Julie E Ledgerwood, DO, the RV 247 Study Team
†Members listed at end of report
Published Online: 22 December 2014
Summary
Background

Ebola virus and Marburg virus cause serious disease outbreaks with high case fatality rates. We aimed to assess the safety and immunogenicity of two investigational DNA vaccines, one (EBO vaccine) encoding Ebola virus Zaire and Sudan glycoproteins and one (MAR) encoding Marburg virus glycoprotein.

Methods

RV 247 was a phase 1b, double-blinded, randomised, placebo-controlled clinical trial in Kampala, Uganda to examine the safety and immunogenicity of the EBO and MAR vaccines given individually and concomitantly. Healthy adult volunteers aged 18–50 years were randomly assigned (5:1) to receive three injections of vaccine or placebo at weeks 0, 4, and 8, with vaccine allocations divided equally between three active vaccine groups: EBO vaccine only, MAR vaccine only, and both vaccines. The primary study objective was to investigate the safety and tolerability of the vaccines, as assessed by local and systemic reactogenicity and adverse events. We also assessed immunogenicity on the basis of antibody responses (ELISA) and T-cell responses (ELISpot and intracellular cytokine staining assays) 4 weeks after the third injection. Participants and investigators were masked to group assignment. Analysis was based on the intention-to-treat principle. This trial is registered at ClinicalTrials.gov, number NCT00997607.

Findings

108 participants were enrolled into the study between Nov 2, 2009, and April 15, 2010. All 108 participants received at least one study injection (including 100 who completed the injection schedule) and were included in safety and tolerability analyses; 107 for whom data were available were included in the immunogenicity analyses. Study injections were well tolerated, with no significant differences in local or systemic reactions between groups. The vaccines elicited antibody and T-cell responses specific to the glycoproteins received and we detected no differences between the separate and concomitant use of the two vaccines. 17 of 30 (57%, 95% CI 37–75) participants in the EBO vaccine group had an antibody response to the Ebola Zaire glycoprotein, as did 14 of 30 (47%, 28–66) in the group that received both vaccines. 15 of 30 (50%, 31–69) participants in the EBO vaccine group had an antibody response to the Ebola Sudan glycoprotein, as did 15 of 30 (50%, 31–69) in the group that received both vaccines. Nine of 29 (31%, 15–51) participants in the MAR vaccine groups had an antibody response to the Marburg glycoprotein, as did seven of 30 (23%, 10–42) in the group that received both vaccines. 19 of 30 (63%, 44–80) participants in the EBO vaccine group had a T-cell response to the Ebola Zaire glycoprotein, as did 10 of 30 (33%, 17–53) in the group that received both vaccines. 13 of 30 (43%, 25–63) participants in the EBO vaccine group had a T-cell response to the Ebola Sudan glycoprotein, as did 10 of 30 (33%, 17–53) in the group that received both vaccines. 15 of 29 (52%, 33–71) participants in the MAR vaccine group had a T-cell response to the Marburg glycoprotein, as did 13 of 30 (43%, 25–63) in the group that received both vaccines.

Interpretation

This study is the first Ebola or Marburg vaccine trial done in Africa, and the results show that, given separately or together, both vaccines were well tolerated and elicited antigen-specific humoral and cellular immune responses. These findings have contributed to the accelerated development of more potent Ebola virus vaccines that encode the same wild-type glycoprotein antigens as the EBO vaccine, which are being assessed during the 2014 Ebola virus disease outbreak in west Africa.

Funding

US Department of Defense Infectious Disease Clinical Research Program and US National Institutes of Health Intramural Research Program.

Series

Violence against women and girls

Prevention of violence against women and girls: what does the evidence say?
Mary Ellsberg, Diana J Arango, Matthew Morton, Floriza Gennari, Sveinung Kiplesund, Manuel Contreras, Charlotte Watts

The health-systems response to violence against women
Claudia García-Moreno, Kelsey Hegarty, Ana Flavia Lucas d'Oliveira, Jane Koziol-McLain, Manuela Colombini, Gene Feder

From work with men and boys to changes of social norms and reduction of inequities in gender relations: a conceptual shift in prevention of violence against women and girls
Rachel Jewkes, Michael Flood, James Lang

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

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Apr 2015 Volume 15 Number 4 p361-486
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Volume 19, Issue 4, April 2015
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April 2015; 35 (3)
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March 2015 Volume 93, Issue 1 Pages 1–222
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Volume 520 Number 7547 pp263-400 16 April 2015
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April 2015, Volume 21 No 4 pp295-414
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April 2015 Vol 15 No 4
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April 16, 2015 Vol. 372 No. 16
http://www.nejm.org/toc/nejm/medical-journal
Perspective
Social Distancing and the Unvaccinated
Y. Tony Yang, Sc.D., LL.M., M.P.H., and Ross D. Silverman, J.D., M.P.H.
N Engl J Med 2015; 372:1481-1483April 16, 2015DOI: 10.1056/NEJMp1501198
[No abstract]
Original Article
A Randomized, Controlled Trial of an Aerosolized Vaccine against Measles
Nicola Low, M.D., Ashish Bavdekar, D.N.B., Lakshmanan Jeyaseelan, Ph.D., Siddhivinayak Hirve, Ph.D., Kavitha Ramanathan, M.Sc., Nicholas J. Andrews, Ph.D., Naseem Shaikh, Ph.D., Ramesh S. Jadi, Ph.D., Arunachalam Rajagopal, M.C.A., Kevin E. Brown, M.D., David Brown, F.R.C.Path., James B. Fink, Ph.D., Oommen John, M.D., Pippa Scott, Ph.D., A. Ximena Riveros-Balta, B.Sc., Michel Greco, M.B.A., Rajeev Dhere, Ph.D., Prasad S. Kulkarni, M.D., and Ana Maria Henao Restrepo, M.D.
N Engl J Med 2015; 372:1519-1529 April 16, 2015 DOI: 10.1056/NEJMoa1407417
Share:
Background
Aerosolized vaccine can be used as a needle-free method of immunization against measles, a disease that remains a major cause of illness and death. Data on the immunogenicity of aerosolized vaccine against measles in children are inconsistent.
Methods
We conducted an open-label noninferiority trial involving children 9.0 to 11.9 months of age in India who were eligible to receive a first dose of measles vaccine. Children were randomly assigned to receive a single dose of vaccine by means of either aerosol inhalation or a subcutaneous injection. The primary end points were seropositivity for antibodies against measles and adverse events 91 days after vaccination. The noninferiority margin was 5 percentage points.
Results
A total of 1001 children were assigned to receive aerosolized vaccine, and 1003 children were assigned to receive subcutaneous vaccine; 1956 of all the children (97.6%) were followed to day 91, but outcome data were missing for 331 children because of thawed specimens. In the per-protocol population, data on 1560 of 2004 children (77.8%) could be evaluated. At day 91,

a total of 662 of 775 children (85.4%; 95% confidence interval [CI], 82.5 to 88.0) in the aerosol group, as compared with 743 of 785 children (94.6%; 95% CI, 92.7 to 96.1) in the subcutaneous group, were seropositive, a difference of −9.2 percentage points (95% CI, −12.2 to −6.3). Findings were similar in the full-analysis set (673 of 788 children in the aerosol group [85.4%] and 754 of 796 children in the subcutaneous group [94.7%] were seropositive at day 91, a difference of −9.3 percentage points [95% CI, −12.3 to −6.4]) and after multiple imputation of missing results. No serious adverse events were attributable to measles vaccination. Adverse-event profiles were similar in the two groups.
Conclusions
Aerosolized vaccine against measles was immunogenic, but, at the prespecified margin, the aerosolized vaccine was inferior to the subcutaneous vaccine with respect to the rate of seropositivity. (Funded by the Bill and Melinda Gates Foundation; Measles Aerosol Vaccine Project Clinical Trials Registry–India number, CTRI/2009/091/000673.)

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April 2015, VOLUME 135 / ISSUE 4
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[Reviewed earlier]

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Volume 7, Issue 2 (June 2015), Pages 10-
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Volume 33, Issue 4, April 2015
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PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
(Accessed 18 April 2015)
Services for Mothers and Newborns During the Ebola Outbreak in Liberia: The Need for Improvement in Emergencies
April 16, 2015 · Research
Background:
The magnitude of the Ebola outbreak in West Africa is unprecedented. Liberia, Guinea, and Sierra Leone are in the bottom ten countries in the Human Development Index, but all had made gains in child survival prior to the outbreak. With closure of healthcare facilities and the loss of health workers secondary to the outbreak, the region risks reversing survival gains achieved in maternal and newborn health.
Methods:
Anonymized service utilization data were downloaded from the Liberia District Health Information Software (DHIS) 2 for selected maternal health services at PHC facilities in Margibi

and Bong Counties from March 2014, when the first case of Ebola was reported in Liberia, through December 2014. Absolute numbers are provided instead of percentage measures because of the lack of a population-based denominator.
Results:
Overall, the data show a decrease in absolute utilization from the start of the outbreak, followed by a slow recovery after October or November. In Bong County, totals were less than 14% of the peak numbers during the outbreak for number of antenatal visits and pregnant women receiving intermittent preventive treatment for malaria in pregnancy (IPTp). For total deliveries, utilization was less than 33% of the highest month. In Margibi County, during what now appears to be the height of the outbreak, numbers dropped to less than 9% of peak utilization for antenatal care visits and 4% for IPTp. Total health facility deliveries dropped to less than 9% of peak utilization.
Conclusion:
It is clear that Bong and Margibi Counties in Liberia experienced a large drop in utilization of maternal health care services during what now appears to be the peak of the Ebola outbreak. As the health of women and their babies is being promoted in the post-2015 sustainable development agenda, it is critical that the issue of maternal and newborn survival in humanitarian emergency settings, like the Ebola outbreak, is prioritized.

Control of a Reassortant Pandemic 2009 H1N1 Influenza Virus Outbreak in an Intensive Swine Breeding Farm: Effect of Vaccination and Enhanced Farm Management Practices

April 13, 2015 · Research

Influenza A viruses in swine cause considerable economic losses and raise concerns about their zoonotic potential. The current paucity of thorough empirical assessments of influenza A virus infection levels in swine herds under different control interventions hinders our understanding of their effectiveness. Between 2012 and 2013, recurrent outbreaks of respiratory disease caused by a reassortant pandemic 2009 H1N1 (H1N1pdm) virus were registered in a swine breeding farm in North-East Italy, providing the opportunity to assess an outbreak response plan based on vaccination and enhanced farm management. All sows/gilts were vaccinated with a H1N1pdm-specific vaccine, biosecurity was enhanced, weaning cycles were lengthened, and cross-fostering of piglets was banned. All tested piglets had maternally-derived antibodies at 30 days of age and were detectable in 5.3% of ~90 day-old piglets. There was a significant reduction in H1N1pdm RT-PCR detections after the intervention. Although our study could not fully determine the extent to which the observed trends in seropositivity or RT-PCR positivity among piglets were due to the intervention or to the natural course of the disease in the herd, we provided suggestive evidence that the applied measures were useful in controlling the outbreak, even without an all-in/all-out system, while keeping farm productivity at full.

PLoS Medicine

(Accessed 18 April 2015)
http://www.plosmedicine.org/

How to Get All Trials Reported: Audit, Better Data, and Individual Accountability

Ben Goldacre
Perspective | published 14 Apr 2015 | PLOS Medicine 10.1371/journal.pmed.1001821

Rationale for WHO's New Position Calling for Prompt Reporting and Public Disclosure of Interventional Clinical Trial Results

Vasee S. Moorthy, Ghassan Karam, Kirsten S. Vannice, Marie-Paule Kieny

Essay | published 14 Apr 2015 | PLOS Medicine 10.1371/journal.pmed.1001819

Evaluating Clinical Trial Designs for Investigational Treatments of Ebola Virus Disease

Ben S. Cooper, Maciej F. Boni, Wirichada Pan-ngum, Nicholas P. J. Day, Peter W. Horby, Piero Olliaro, Trudie Lang, Nicholas J. White, Lisa J. White, John Whitehead

Research Article | published 14 Apr 2015 | PLOS Medicine 10.1371/journal.pmed.1001815

A New Synthesis for Dual Use Research of Concern

Michael J. Imperiale, Arturo Casadevall

Essay | published 14 Apr 2015 | PLOS Medicine 10.1371/journal.pmed.1001813

PLoS Neglected Tropical Diseases

http://www.plosntds.org/

(Accessed 18 April 2015)

Social Pathways for Ebola Virus Disease in Rural Sierra Leone, and Some Implications for Containment

Paul Richards, Joseph Amara, Mariane C. Ferme, Prince Kamara, Esther Mokuwa, Amara Idara Sheriff, Roland Suluku, Maarten Voors

Research Article | published 17 Apr 2015 | PLOS Neglected Tropical Diseases 10.1371/journal.pntd.0003567

Estimating the Global Burden of Endemic Canine Rabies

Katie Hampson, Laurent Coudeville, Tiziana Lembo, Maganga Sambo, Alexia Kieffer, Michaël Attlan, Jacques Barrat, Jesse D. Blanton, Deborah J. Briggs, Sarah Cleaveland, Peter Costa, Conrad M. Freuling, Elly Hiby, Lea Knopf, Fernando Leanes, François-Xavier Meslin, Artem Metlin, Mary Elizabeth Miranda, Thomas Müller, Louis H. Nel, Sergio Recuenco, Charles E. Rupprecht, Carolin Schumacher, Louise Taylor, Marco Antonio Natal Vigilato, Jakob Zinsstag, Jonathan Dushoff, on behalf of the Global Alliance for Rabies Control Partners for Rabies Prevention

Research Article | published 16 Apr 2015 | PLOS Neglected Tropical Diseases 10.1371/journal.pntd.0003709

Neglected Tropical Diseases among the Association of Southeast Asian Nations (ASEAN): Overview and Update

Peter J. Hotez, Maria Elena Bottazzi, Ulrich Strych, Li-Yen Chang, Yvonne A. L. Lim, Maureen M. Goodenow, Sazaly AbuBakar

Review | published 16 Apr 2015 | PLOS Neglected Tropical Diseases 10.1371/journal.pntd.0003575

A DNA Vaccine against Yellow Fever Virus: Development and Evaluation

Milton Maciel, Fábia da Silva Pereira Cruz, Marli Tenório Cordeiro, Márcia Archer da Motta, Klécia Marília Soares de Melo Cassemiro, Rita de Cássia Carvalho Maia, Regina Célia Bressan Queiroz de Figueiredo, Ricardo Galler, Marcos da Silva Freire, Joseph Thomas August, Ernesto T. A. Marques, Rafael Dhalia

Research Article | published 13 Apr 2015 | PLOS Neglected Tropical Diseases 10.1371/journal.pntd.0003693

PLoS One

[Accessed 18 April 2015]

http://www.plosone.org/

Factors Associated to Vaccination against Influenza among Elderly in a Large Brazilian Metropolis
Ana Paula Sayuri Sato, José Leopoldo Ferreira Antunes, Roudom Ferreira Moura, Fabíola Bof de Andrade, Yeda Aparecida Oliveira Duarte, Maria Lúcia Lebrão
Research Article | published 13 Apr 2015 | PLOS ONE 10.1371/journal.pone.0123840
Health and Economic Outcomes of Introducing the New MenB Vaccine (Bexsero) into the Italian Routine Infant Immunisation Programme
Marcello Tirani, Michela Meregaglia, Alessia Melegaro
Research Article | published 13 Apr 2015 | PLOS ONE 10.1371/journal.pone.0123383

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

Proceedings of the Royal Society B
07 May 2015; volume 282, issue 1806
http://rspb.royalsocietypublishing.org/content/282/1806?current-issue=y
Avoidable errors in the modelling of outbreaks of emerging pathogens, with special reference to Ebola
Aaron A. King, Matthieu Domenech de Cellès, Felicia M. G. Magpantay, Pejman Rohani
Proc. R. Soc. B 2015 282 20150347; DOI: 10.1098/rspb.2015.0347. Published 1 April 2015
Abstract
As an emergent infectious disease outbreak unfolds, public health response is reliant on information on key epidemiological quantities, such as transmission potential and serial interval. Increasingly, transmission models fit to incidence data are used to estimate these parameters and guide policy. Some widely used modelling practices lead to potentially large errors in parameter estimates and, consequently, errors in model-based forecasts. Even more worryingly, in such situations, confidence in parameter estimates and forecasts can itself be far overestimated, leading to the potential for large errors that mask their own presence. Fortunately, straightforward and computationally inexpensive alternatives exist that avoid these problems. Here, we first use a simulation study to demonstrate potential pitfalls of the standard practice of fitting deterministic models to cumulative incidence data. Next, we demonstrate an

alternative based on stochastic models fit to raw data from an early phase of 2014 West Africa Ebola virus disease outbreak. We show not only that bias is thereby reduced, but that uncertainty in estimates and forecasts is better quantified and that, critically, lack of model fit is more readily diagnosed. We conclude with a short list of principles to guide the modelling response to future infectious disease outbreaks.

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
[Reviewed earlier]

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
17 April 2015 vol 348, issue 6232, pages 257-368
http://www.sciencemag.org/current.dtl
Sanitation
For toilets, money matters
Jocelyn Kaiser

About 1 billion people in the developing world still walk out to a field, the bushes, or an open waterway to defecate instead of using a latrine. That has contributed to high rates of diarrheal disease. The problem is particularly acute in India, where Prime Minister Narendra Modi has vowed to build 111 million toilets as part of a plan to end open defecation by October 2019. But exactly how to get there is surprisingly controversial. Now, a large, controlled experiment, conducted in India's neighbor Bangladesh and published online this week in Science, finds that the key to getting people to build hygienic latrines is to subsidize the cost. Although other experts say these results are important, some caution that building toilets doesn't always mean people will use them or be healthier.
SANITATION SUBSIDIES

Encouraging sanitation investment in the developing world: A cluster-randomized trial

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Author Affiliations
1Deptartment of Economics, University of Maryland, College Park, MD 20742, USA.
2School of Management, Yale University, New Haven, CT 06520, USA.

Abstract
Poor sanitation contributes to morbidity and mortality in the developing world, but there is disagreement on what policies can increase sanitation coverage. To measure the effects of alternative policies on investment in hygienic latrines, we assigned 380 communities in rural Bangladesh to different marketing treatments—community motivation and information; subsidies; a supply-side market access intervention; and a control—in a cluster-randomized trial. Community motivation alone did not increase hygienic latrine ownership (+1.6 percentage points, p=0.43), nor did the supply-side intervention (+0.3 percentage points, p=.90). Subsidies to the majority of the landless poor increased ownership among subsidized households (+22.0 percentage points, p<.001) and their unsubsidized neighbors (+8.5 percentage points, p=.001), which suggests investment decisions are interlinked across neighbors. Subsidies also reduced open defecation by 14 percentage points (p<.001).

Infectious Disease

Combating emerging viral threats

Elena Bekerman, Shirit Einav
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Although hundreds of viruses are known to cause human disease, antiviral therapies are approved for fewer than 10. Most approved antiviral drugs target viral enzymes, most commonly proteases and polymerases. Such direct acting antivirals (DAAs) have shown considerable success in the treatment of HIV and hepatitis C virus (HCV) infections. However, this approach does not scale easily and is limited particularly with respect to emerging and reemerging viruses against which no vaccines or antiviral therapies are approved.

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

[Reviewed earlier]

Vaccine
Volume 33, Issue 19, Pages 2197-2296 (5 May 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/19
[Reviewed earlier]

Vaccines — Open Access Journal
(Accessed 18 April 2015)
http://www.mdpi.com/journal/vaccines
Review: **Vaccine Adjuvants: from 1920 to 2015 and Beyond**
by Alberta Di Pasquale, Scott Preiss, Fernanda Tavares Da Silva and Nathalie Garçon
Vaccines 2015, *3*(2), 320-343; doi:10.3390/vaccines3020320 - published 16 April 2015
Review: **National Differences in Requirements for Ethical and Competent Authority Approval for a Multinational Vaccine Trial under the EU Directive 2001/20/EC**
by Eva van Doorn, Eelko Hak and Bob Wilffert
Vaccines 2015, *3*(2), 263-292; doi:10.3390/vaccines3020263 - published 14 April 2015

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 18 April 2015
Australia to deny benefits to parents refusing to vaccinate their children
Prime Minster Tony Abbott's 'no jab, no pay' policy to withhold welfare and child care benefits of up to $11,500 a year
April 12, 2015 11:49AM ET

Australian Prime Minister Tony Abbott announced Sunday that the country is to adopt a "no jab, no pay" policy to deny some government benefits to parents who refuse to vaccinate their children.

The policy change comes amid a debate over immunization for children, with some parents believing — despite overwhelming medical evidence to the contrary — vaccines against deadly diseases are dangerous.

The anti-vaccination movement has coincided with the resurgence of measles, a preventable disease, in some European countries as well as in U.S. states such as Colorado and California.

"It's essentially a 'no jab, no pay' policy from this government," Abbott told reporters in Sydney. "It's a very important public health announcement. It's a very important measure to keep our children and our families as safe as possible."

Under current Australian laws, parents who have conscientious objections about immunization can claim child care and welfare payments.

If the measures are passed, those parents would be denied the payments — which include child care rebates, benefits and family tax benefit supplements — reportedly missing out on up to $11,500 per child annually.

Parents unwilling to vaccinate the children on medical or religious grounds would still be allowed to tap into the benefits, although under tighter eligibility requirements…

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 18 April 201
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 18 April 2015
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 18 April 2015
[No new, unique, relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 18 April 2015
[No new, unique, relevant content]

The Economist
http://www.economist.com/

Accessed 18 April 2015
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 18 April 2015
Polio Vaccine Found "Safe And Effective" 60 Years Ago: What Would Salk Think Today?
It was 60 years ago yesterday that the nation heaved an enormous collective sigh of relief. The largest clinical trial for a vaccine in history had concluded, the data had been collected and analyzed, and the results were announced on April 12, 1955, coincidentally the ten-year anniversary of polio sufferer [...]
Tara Haelle, Contributor Apr 13, 2015

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 18 April 2015
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 18 April 2015
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 18 April 2015
California declares Disneyland measles outbreak over as vaccine fight rages on
No new cases reported in state in 42 days
Outbreak sickened 150 effectively over in US but still a problem in Quebec
Raya Jalabi and agencies
Friday 17 April 2015 16.46 EDT

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

Mail & Guardian
http://mg.co.za/
Accessed 18 April 2015
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 18 April 2015

[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 18 April 2015
California Parents Opposing State-Mandated Vaccinations Delay Vote
By ROBERT B. GUNNISONAPRIL 15, 2015

SACRAMENTO — Several hundred Californians swarmed the State Capitol on Wednesday to oppose a bill that would eliminate their right not to vaccinate their children against contagious diseases like measles. They were able to help stall a committee vote on the legislation by a week.

The bill, introduced after a measles outbreak over the winter that originated at Disneyland, would require nearly all children to be vaccinated, eliminating the growing use of the so-called personal belief exemption that has contributed to the spread of preventable diseases. Parents who refused to immunize their children and did not have a medical exemption would be forced to teach their children at home.

The bill, which was passed by the State Senate's Health Committee, was up for a hearing on Wednesday before the Senate Education Committee. There, the small but vocal minority of parents who object to scientifically proven vaccinations showed up in force and helped stall the measure.

Herd Immunity
Why California's Approach to Tightening Vaccine Rules Has Potential to Backfire
APRIL 14, 2015

In a number of states, parents are allowed to opt out of legal requirements to have their children vaccinated before entering school by claiming a "personal belief" or "philosophical" exemption. These provisions have raised a great deal of concern since the Disneyland measles outbreak, including in California, where it began. Unfortunately, the blundering approach state legislators there have taken shows how direct attacks on exemptions can rally the anti-vaccine cause.

Senate Bill 277, which would eliminate the personal belief exemption, passed the Senate Health Committee on a 6-2 vote last week and heads to its second hearing in the Education Committee on Wednesday. The bill is scheduled to go through multiple committees, which is creating numerous opportunities for opponents to promote misinformation about the supposed dangers of vaccines.

Robert F. Kennedy Jr., an anti-vaccine leader, compared the issue to the Holocaust in comments in Sacramento before the screening of a scientifically unsubstantiated anti-vaccine film last week. An anti-vaccine group from Minnesota financed the airing of a television ad showing an infant having a seizure. Other vaccine opponents made similarly dubious claims about the risks of immunization in testimony to the Health Committee and jeered vaccine advocates from the audience…

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 18 April 2015
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/

Accessed 18 April 2015
[No new, unique, relevant content]

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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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