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

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

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

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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.*

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

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Zika virus [to 5 March 2016]
Public Health Emergency of International Concern (PHEIC)
http://www.who.int/emergencies/zika-virus/en/

WHO - Press Conference: update on global response to Microcephaly (Geneva, 4 March 2016)

[Video: 00:53:18]

WHO update on global response to microcephaly, neurological disorders and Zika virus

Dr Bruce Aylward, Executive Director, Outbreaks and Health Emergencies (ai), WHO, provided a broad overview and noted important Geneva meetings on Zika to be held next week including:

:: 7-9 March - Consultation on continuing research a link between the Zika virus and the neurological disorders Guillain-Barre syndrome and microcephaly, and review on new products including rapid diagnostics, vaccines, rapid control measures, etc.

:: Emergency Committee on Zika under IHR to review evolving information, review the current PHEIC designation, and review recommendations around travel and trade, and around coordinated international action.

WHO: Zika Virus, Microcephaly and Guillain–Barré syndrome situation report – 4 March 2016

Read the full situation report

Summary

:: Between 1 January 2007 and 3 March 2016, a total of 52 countries and territories have reported autochthonous (local) transmission or indication of transmission of Zika virus (41 since 1 January 2015). Five of these countries and territories reported a Zika virus outbreak that is now over. In addition, three countries and territories have reported locally acquired infection, probably through sexual transmission.

:: Among the 52 countries and territories, Lao People's Democratic Republic is the latest to report autochthonous transmission of Zika virus. France, Italy and the United States of America have reported locally acquired Zika virus infection in the absence of any known mosquito vectors.

:: The geographical distribution of Zika virus has steadily widened since the virus was first detected in the Americas in 2015. Autochthonous Zika virus transmission has been reported in 31 countries and territories of this region. Zika virus is likely to be transmitted and detected in other countries within the geographical range of competent mosquito vectors, especially Aedes aegypti.

:: So far an increase in microcephaly cases and other neonatal malformations has only been reported in Brazil and French Polynesia, although two cases linked to a stay in Brazil were detected in the United States of America and Slovenia.

:: During 2015 and 2016, 8 countries and territories have reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases.

:: A recently published case control study in French Polynesia provides further evidence of a causal relationship between Zika virus infection and GBS.

:: The global prevention and control strategy launched by WHO as a Strategic Response Framework encompasses surveillance, response activities and research, and this situation report is organized under those headings. Following consultation with partners and taking changes in caseload into account, the framework will be updated at the end of March 2016 to reflect epidemiological evidence coming to light and the evolving division of roles and responsibilities for tackling this emergency.

WHO: Pregnancy management in the context of Zika

2 March 2016 -- WHO releases new guidance, today, on pregnancy management during the Zika virus epidemic. The guidance aims to reduce the risk of maternal Zika infection and to help manage potential complications during pregnancy to give both mothers and their babies the best possible health outcomes.
:: Read the guidance on pregnancy management

Disease Outbreak News (DONs)
:: Zika virus infection – Netherlands - Sint Maarten 4 March 2016
:: Zika virus infection – Saint Vincent and the Grenadines 1 March 2016
:: Zika virus infection – Trinidad and Tobago 29 February 2016

WHO fact sheets
:: Microcephaly 2 March 2016

Zika Open
[Bulletin of the World Health Organization]
:: All papers available here
No new papers posted.

CDC/ACIP [to 5 March 2016]
http://www.cdc.gov/media/index.html
FRIDAY, MARCH 4, 2016
Zika Action Plan Summit - April 1, 2016

CDC is hosting a one-day Zika Action Plan Summit as the nation faces likely local mosquito-borne transmission of Zika virus in some places in the continental United States. The Commonwealth of Puerto Rico, U.S. Virgin Islands, and American Samoa are already experiencing active mosquito-borne transmission. The U.S. government has planned this Summit to provide state and local senior officials with the information and tools needed to improve Zika preparedness and response within their states and jurisdictions.

Participants will hear the latest scientific knowledge about Zika, including implications for pregnant women and strategies for mosquito control. This meeting will also provide an opportunity to increase knowledge of best communications practices and identify possible gaps in preparedness and response at the federal, state, and local levels and help begin to address possible gaps.

The anticipated outcome of the summit is to arm state and local leaders with the necessary knowledge and technical support to have a comprehensive Zika Readiness Action Plan for their jurisdiction, including plans for preparedness and response activities.
Who

:: State and local senior officials
:: Representatives from multiple federal departments involved in Zika response
:: Representatives from non-government organizations
:: CDC experts
When
Save the Date, Friday, April 1, 2016
Where
CDC Headquarters 1600 Clifton Road, Atlanta GA 30329; sessions may be available by video conference.

MONDAY, FEBRUARY 29, 2016
CDC adds 2 destinations to interim travel guidance related to Zika virus - Media Statement
CDC is working with other public health officials to monitor for ongoing Zika virus transmission. Today, CDC added the following destinations to the Zika virus travel notices: St. Vincent and the Grenadines & Sint Maarten

MMWR March 4, 2016 / Vol. 65 / No. 8
:: Zika Virus Infection Among U.S. Pregnant Travelers — August 2015–February 2016
:: Transmission of Zika Virus Through Sexual Contact with Travelers to Areas of Ongoing Transmission — Continental United States, 2016

FDA [to 5 March 2016]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
March 01, 2016
FDA issues recommendations to reduce the risk of Zika virus transmission by human cell and tissue products
As an additional safety measure against the emerging Zika virus outbreak, the U.S. Food and Drug Administration today issued new guidance for immediate implementation providing recommendations to reduce the potential transmission risk of Zika virus from human cells, tissues, and cellular and tissue-based products (HCT/Ps). The guidance addresses donation of HCT/Ps from both living and deceased donors, including donors of umbilical cord blood, placenta, or other gestational tissues.

The new guidance is a part of the FDA's ongoing efforts to protect HCT/Ps and blood products from Zika virus transmission. On Feb. 16, the FDA issued recommendations for reducing the risk of Zika virus via blood transfusion in the U.S.

"Though there is more to be learned about the transmission of Zika virus, given what we know about the virus at this point, which also is informed by our understanding of similar viruses, we must address the potential risk of Zika virus transmission by human cells and tissues," said Peter Marks, M.D., Ph.D., director of the FDA's Center for Biologics Evaluation and Research. "Providing HCT/P establishments with donor eligibility recommendations will help reduce that potential risk."

There is a potential risk that the Zika virus can be transmitted by HCT/Ps used as part of a medical, surgical, or reproductive procedure. HCT/Ps include products such as corneas, bone,

skin, heart valves, hematopoietic stem/progenitor cells (HPCs), gestational tissues such as amniotic membrane, and reproductive tissues such as semen and oocytes...

According to the Centers for Disease Control and Prevention, Zika virus can be spread by a man to his sexual partners. And to date, there have been several cases of sexual transmission in the U.S. Current information about Zika virus detection in semen suggests that a period of ineligibility longer than the waiting period that has been recommended for donors of Whole Blood and blood components is necessary for HCT/P donors.

Recommendations for living donors of HCT/Ps: Donors should be considered ineligible if they were diagnosed with Zika virus infection, were in an area with active Zika virus transmission, or had sex with a male with either of those risk factors, within the past six months. Donors of umbilical cord blood, placenta, or other gestational tissues should be considered ineligible if they have had any of the above risk factors at any point during their pregnancy.

Recommendations for deceased (non-heart-beating) donors: Donors should be considered ineligible if they were diagnosed with Zika virus infection in the past six months.
A deferral period of six months was chosen because of the limited data available on the length of time the virus can persist in all tissues. Zika virus has been detected in tissues and body fluids after the virus is no longer detectable in the blood stream, and has been detected in semen possibly up to 10 weeks after the onset of symptoms. Given the uncertainty, six months was determined to provide the appropriate level of caution.

Less evidence exists regarding the potential for transmission of Zika virus by HCT/Ps typically recovered from deceased donors. As more information becomes available, the understanding of the risks to recipients of HCT/Ps, including HCT/Ps recovered from deceased donors, may evolve. The FDA will continue to monitor the situation, and will carefully evaluate new information regarding the associated risks as it becomes available.

In addition to the guidance documents addressing the nation's blood supply and HCT/Ps, the FDA continues to prioritize the development of blood donor screening and diagnostic tests that may be useful for identifying the presence of or recent infection with the virus, prepare to evaluate the safety and efficacy of investigational vaccines and therapeutics that might be developed, and review technology that may help suppress populations of the mosquitoes that can spread the virus…

Donor Screening Recommendations to Reduce the Risk of Transmission of Zika Virus by Human Cells, Tissues, and Cellular and Tissue-Based Products; Guidance for Industry (PDF - 76KB)
Posted: 3/1/2016

Sabin Vaccine Institute [to 5 March 2016]
http://www.sabin.org/updates/ressreleases
Friday, March 4, 2016
Sabin President Peter Hotez Testifies at House Hearings on Zika, Infectious Diseases
Peter Hotez, M.D., Ph.D., president of the Sabin Vaccine Institute (Sabin) and director of the Sabin Product Development Partnership (Sabin PDP), testified this week at two congressional

hearings: the House Energy and Commerce Subcommittee on Oversight and Investigations hearing, "Examining the U.S. Public Health Response to the Zika Virus"; and the House Foreign Affairs Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations on "The Growing Threat of Cholera and Other Diseases in the Middle East."

During the hearing on the Zika virus, Chairman Tim Murphy (R-PA) and other members of the subcommittee sought greater clarity on the U.S. government's response to the outbreak in Latin America. The first panel included witnesses from the federal government, including Thomas Frieden, M.D., director of the Centers for Disease Control and Prevention, and Anthony Fauci, M.D., Director, National Institute of Allergy and Infectious Diseases at the National Institutes of Health. Dr. Hotez, who served on the second panel of NGO witnesses, shared his concerns that the Zika virus could spread to the Gulf Coast as early as this spring. "I am particularly concerned about the U.S. Gulf Coast because it represents the perfect storm of key factors that promote the spread of Zika, including extreme poverty and the unique presence of the Aedes aegypti mosquito," said Dr. Hotez. *Video of the full hearing is available here.*

"To fight Zika, the U.S. government needs to coordinate with our global health partners on a two-pronged approach towards controlling the spread of Zika: aggressive mosquito control with insecticides, and source reduction to remove standing water that breeds mosquitoes," Dr. Hotez said in his prepared testimony. "In addition to coordination on mosquito control and source reduction within the federal government, there needs to be similar coordination between the federal, state, and local governments."

At the hearing on cholera and other diseases in the Middle East, Chairman Chris Smith addressed the conflicts in places such as Iraq, Syria and Lebanon and the resulting threat of cholera and other emerging viral and neglected diseases in the region. *Video of the full hearing is available here.*

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EBOLA/EVD [to 5 March 2016]
Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

Ebola Situation Reports
[While no announcement of a change in reporting cycle is evident, we deduce that Ebola Situation Reports have been reduced to a bi-weekly cycle given the spacing of the last few reports – previous update at 17 February 2016]
Ebola Situation Report - 2 March 2016
[No new Ebola cases reported. Liberia, Sierra Leone and Guinea are each moving through enhanced surveillance periods following their last, respective confirmed EVD cases and associated contact clusters.]

WHO: Clinical care for survivors of Ebola virus disease
Interim guidance

February 2016 :: 31 pages
Languages: English
WHO reference number: WHO Ref: WHO/EVD/OHE/PED/16.1.rev1
Downloads: Clinical care for survivors of Ebola virus disease: interim guidance
Overview

Today, there are over 10 000 survivors of Ebola virus disease. A number of medical problems have been reported in survivors, including mental health issues. Ebola virus may persist in some body fluids, including semen. Ebola survivors need comprehensive support for the medical and psychosocial challenges they face and also to minimize the risk of continued Ebola virus transmission.

WHO has developed this document to guide health services on how to provide quality care to survivors of Ebola virus disease. Table of contents include:
:: Introduction
:: Planning follow-up of the Ebola survivor
:: Common sequelae of Ebola virus disease and recommended evaluation and clinical management
:: Considerations for special populations
:: Monitoring for persistent Ebola virus infection in survivors: guidelines for testing and counselling
:: Infection prevention and control considerations in survivors
:: Risk communication considerations.

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POLIO [to 5 March 2016]
Public Health Emergency of International Concern (PHEIC)

Polio this week as of 2 March 2016
:: **The Director General of WHO, Dr Margaret Chan, upon the advice of the Emergency Committee, concluded that poliovirus continues to constitute a Public Health Emergency of International Concern (PHEIC).** Read the statement here *[and below]*
:: The Journal of Infectious Diseases has published a supplemental journal on Nigeria's polio eradication effort. Read more here.
:: A new method to administer the inactivated poliovirus vaccine (IPV), developed by a collaboration of Australian institutions, has had promising results in animal trials. The Nanopatch may enable unprecedented levels of dose reduction.
:: There are seven weeks to go until the globally synchronized switch from the trivalent to bivalent oral polio vaccine
Selected Country Levels Updates [excerpted]
Pakistan
:: Three new cases of wild poliovirus type 1 (WPV1) were reported in the last week, in Quetta, Balochistan, and the districts of Hangu and Peshawar in Khyber Pakhtunkhwa, with onset of paralysis between 1 and 12 February. The total number of WPV1 cases for 2016 is now 5, compared to 13 reported for 2015 at this point last year.

:: Four new WPV1 environmental positive samples were reported in the past week; one in Faisalabad, Punjab; two in Karachi Gadap, Sindh; and one in Peshawar, Khyber Pakhtunkhwa; with collection dates between 3 and 10 February.

Statement on the 8th IHR Emergency Committee meeting regarding the international spread of poliovirus

WHO statement
1 March 2016
[Excerpts; Editor's text bolding]
The eighth meeting of the Emergency Committee under the International Health Regulations (2005) (IHR) regarding the international spread of poliovirus was convened via teleconference by the Director-General on 12 February 2016. As with the seventh meeting, the Emergency Committee reviewed the data on circulating wild poliovirus as well as circulating vaccine-derived polioviruses (cVDPV). The latter is particularly important as cVDPVs reflect serious gaps in immunity to poliovirus due to weaknesses in routine immunization coverage in otherwise polio-free countries. In addition, it is essential to stop type 2 cVDPVs in advance of the globally synchronized withdrawal of type 2 OPV in April 2016.

The following IHR States Parties submitted an update on the implementation of the Temporary Recommendations since the Committee last met on 10 November 2015: Afghanistan, Pakistan and Guinea.

Wild polio
The Committee noted that since the declaration that the international spread of polio constituted a Public Health Emergency of International Concern (PHEIC) in May 2014, strong progress has been made by countries toward interruption of wild poliovirus transmission and implementation of Temporary Recommendations issued by the Director-General. There has been an overall decline in the occurrence of international spread of wild poliovirus. **The Committee was particularly encouraged by the intensified efforts and progress toward interruption of poliovirus transmission in Pakistan and Afghanistan despite challenging circumstances, and the renewed emphasis on cooperation along the long international border between the two countries.**

The Committee noted however that the international spread of wild poliovirus has continued, with two new recent reports of exportations from Pakistan into Afghanistan which occurred in October and November 2015. These cases occurred in Nangarhar and Kunar Provinces, in the eastern region, adjoining the Pakistan border. While there has been no new exportation from Afghanistan to Pakistan, ongoing transmission particularly in inaccessible parts of the Eastern Region of Afghanistan close to the international border presents an ongoing risk.

The Committee noted that while Pakistan and Afghanistan have historically shared a vast common zone of poliovirus transmission, the ongoing spread between the two countries is occurring from discrete zones of persistent transmission in each country. Strong programmatic action in these zones should interrupt such cross-border transmission, as illustrated by the experience in regions that were previously polio-endemic.

The committee re-emphasized that under the IHR, spread of poliovirus between two Member States can constitute international spread. The Committee acknowledged that cross border collaboration efforts have continued to be strengthened. Whilst border vaccination between these two countries is limited to children under ten years of age, efforts are being made to vaccinate departing travellers of all age groups from airports when leaving this epidemiological block formed by the two countries. The committee was particularly pleased that the Temporary Recommendations for international travellers of all ages are now being implemented in Afghanistan at the international airport in Kabul. In this respect, it noted that all countries, and particularly those with embassies in Afghanistan and Pakistan, should facilitate implementation of Temporary Recommendations through adopting procedures that include proof of polio vaccination as part of visa application processes for travellers departing from Afghanistan or Pakistan.

The committee noted that globally there are still significant vulnerable areas and populations that are inadequately immunized due to conflict, insecurity and poor coverage associated with weak immunization programmes. Such vulnerable areas include countries in the Middle East, the Horn of Africa, central Africa and parts of Europe. The hard-earned gains of the GPEI can be quickly lost if there is re-introduction of poliovirus in settings of disrupted health systems and complex humanitarian emergencies. The large population movements across the Middle East and from Afghanistan and Pakistan create a heightened risk of international spread of polio. There is a risk of missing polio vaccination among refugee and mobile populations, adding to missed and under vaccinated populations in Europe, the Middle East and Africa. An estimated three to four million people have been displaced to Turkey, Lebanon, and Jordan and are at the centre of a mass migration across Europe.

The committee was very concerned by the weakening of AFP surveillance in Equatorial Guinea, and urged renewed efforts to strengthen surveillance and routine immunization there. Insecurity in Africa, notably in parts of Cameroon and Somalia, continues to pose a threat to polio eradication in that continent.

Vaccine derived poliovirus

The current circulating vaccine-derived poliovirus (cVDPV) outbreaks across four WHO regions illustrate serious gaps in routine immunization programs, leading to significant pockets of vulnerability to polio outbreaks. In 2015, six outbreaks of circulating vaccine derived poliovirus have occurred – three cVDPV type 1 outbreaks (Ukraine, Madagascar and Lao People's Democratic Republic) and three cVDPV type 2 outbreaks (Myanmar, Nigeria and Guinea).

Six additional cases of cVDPV type 2 have been reported in Guinea since the last meeting. This increases the threat of international spread, particularly to neighbouring countries, where the Ebola epidemic has weakened health systems including routine immunization. This is of particular concern given the imminent global withdrawal of type 2 oral polio vaccine (OPV2) in April 2016. The committee noted with concern that AFP surveillance does not meet international standards in parts of Guinea, heightening concern about whether circulation could be missed. **Post-Ebola there was a new community reluctance to accept vaccination, and this**

needs to be urgently addressed. The committee acknowledged the efforts to improve the quality of supplementary immunization activities (SIAs), and urged that this continue.

The committee noted that in Lao People's Democratic Republic and Myanmar there was ongoing circulation of vaccine derived polioviruses, particularly in hard to reach populations in both countries, underlining the importance of communication to counteract vaccine hesitancy.

While there have been no new cases of cVDPV in Ukraine, Madagascar, South Sudan or Nigeria since the last committee meeting, threats remain. More needs to be done in each of these countries to improve routine coverage and AFP surveillance. **In Ukraine, the committee was concerned by the restricted availability of polio vaccines (including non-availability to persons >10 years of age) and suboptimal routine immunization, and reports of lack of community acceptance of polio vaccines.** This reluctance to be vaccinated needs to be addressed through well-crafted communications. In South Sudan and Nigeria, there was heightened risk of further circulation in areas affected by conflict and insecurity. Complacency is another risk in Nigeria, and as the number of SIAs decreases, the strengthening of routine immunization needs to be a high priority.

Conclusion

The Committee unanimously agreed that the international spread of polio remains a Public Health Emergency of International Concern (PHEIC) and recommended the extension of the Temporary Recommendations for a further three months. The Committee considered the factors expressed in reaching this conclusion at the seventh meeting still applied:

:: The continued international spread of wild poliovirus during 2015 involving Pakistan and Afghanistan.

:: The risk and consequent costs of failure to eradicate globally one of the world's most serious vaccine preventable diseases.

:: The continued necessity of a coordinated international response to improve immunization and surveillance for wild poliovirus, stop its international spread and reduce the risk of new spread.

:: **The serious consequences of further international spread for the increasing number of countries in which immunization systems have been weakened or disrupted by conflict and complex emergencies.** Populations in these fragile states are vulnerable to outbreaks of polio. Outbreaks in fragile states are exceedingly difficult to control and threaten the completion of global polio eradication during its end stage.

:: The importance of a regional approach and strong cross-border cooperation, as much international spread of polio occurs over land borders, while recognizing that the risk of distant international spread remains from zones with active poliovirus transmission.

:: Additionally with respect to cVDPV:

::: cVDPVs also pose a risk for international spread, and if there is no urgent response with appropriate measures, particularly threaten vulnerable populations as noted above;

::: The emergence and circulation of VDPVs in four WHO regions demonstrates significant gaps in population immunity at a critical time in the polio endgame;

::: There is a particular urgency of stopping type 2 cVDPVs in advance of the globally synchronized withdrawal of type 2 component of the oral poliovirus vaccine in April 2016.

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MERS-CoV [to 5 March 2016]

Disease Outbreak News (DONs)
:: Middle East respiratory syndrome coronavirus (MERS-CoV) – Saudi Arabia 29 February 2016
Between 1 and 16 February 2016, the National IHR Focal Point for the Kingdom of Saudi Arabia notified WHO of 6 additional cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection, including 3 deaths…
…Based on the current situation and available information, WHO encourages all Member States to continue their surveillance for acute respiratory infections and to carefully review any unusual patterns….

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WHO & Regionals [to 5 March 2016]

Weekly Epidemiological Record (WER) 4 March 2016, vol. 91, 9 (pp. 105–120)
Contents:
105 Progress towards measles elimination in Nepal, 2007–2014
112 Integrated Disease Surveillance and Response in Liberia: national expert group meeting, 15–19 September 2015

Disease Outbreak News (DONs)
:: Zika virus infection – Saint Vincent and the Grenadines 1 March 2016
:: Middle East respiratory syndrome coronavirus (MERS-CoV) – Saudi Arabia 29 February 2016
:: Zika virus infection – Trinidad and Tobago 29 February 2016

:: WHO Regional Offices
WHO African Region AFRO ::
:: WHO Regional Director for Africa, Dr Moeti concludes official visit to Cote d'Ivoire
Abidjan, 3 March 2016 - The WHO Regional Director for Africa, Dr Matshidiso Moeti concluded a three day official visit to Cote d'Ivoire yesterday. The visit began on Monday 29 February and was aimed at further strengthening collaboration between WHO and the Government of Cote d'Ivoire…

WHO Region of the Americas PAHO
:: PAHO/WHO calls on countries to strengthen surveillance of birth defects, including microcephaly (03/03/2016)

WHO South-East Asia Region SEARO
:: Media Statement on World Birth Defects Day 03 March 2016

WHO European Region EURO
No new digest content identified.

WHO Eastern Mediterranean Region EMRO

:: Countries urged to enhance preparedness and readiness measures for Zika virus infection in the Region 3 March 2016
:: Life-saving medical supplies reach besieged city in Syria
2 March 2016 – Today, WHO delivered urgently needed medicines, including antibiotics and painkillers, to the besieged city of Mouadamieh, 10 km south of Damascus. Since January 2016, WHO has delivered medicines, medical supplies and vaccines to a number of hard-to-reach areas in Syria, but at times has faced the challenge of having vital medicines removed from shipments depriving people of vital medical support.

WHO Western Pacific Region
:: WHO and partners reflect on the outcomes of the Conference of Parties on climate change
MANILA, 2 March 2016 – From 30 November to 11 December 2015, world leaders, climate change experts, representatives from the private sector and civil society organizations met in Paris to set a new standard for dealing with complex global problems posed by climate change. In all, 195 countries committed to limit the temperature increase to well below two degrees Celsius. This United Nations Conference of Parties on climate change, (COP 21) resulted in a major agreement and "a huge flame of hope."

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CDC/ACIP [to 5 March 2016]
http://www.cdc.gov/media/index.html
[see Zika coverage above which includes CDC briefing content]

MMWR March 4, 2016 / Vol. 65 / No. 8
:: Cluster of Ebola Virus Disease Linked to a Single Funeral — Moyamba District, Sierra Leone, 2014
:: Progress Toward Measles Elimination — Nepal, 2007–2014
:: Zika Virus Infection Among U.S. Pregnant Travelers — August 2015–February 2016
:: Transmission of Zika Virus Through Sexual Contact with Travelers to Areas of Ongoing Transmission — Continental United States, 2016

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Announcements/Milestones/Perspectives

United Nations
Secretary-General Appoints Commission on Health Employment and Economic Growth
2 March 2016
Secretary-General SG/A/1639
Press Release
United Nations Secretary-General Ban Ki-moon today announced the appointment of a Commission on Health Employment and Economic Growth.

The global economy is projected to create around 40 million new health sector jobs by 2030, mostly in middle- and high-income countries. Despite this growth, there is a projected shortage of 18 million health workers in low- and lower-middle-income countries. The Commission is tasked with proposing actions to redress these inequities, and stimulate and guide the creation of health and social sector jobs for inclusive economic growth.

"Having a sufficient number of health workers responsive to population needs and well-distributed across the world will be critical to the achievement of the Sustainable Development Goals and to addressing the growing challenges to global public health security," said Secretary-General Ban Ki-moon. "I expect this Commission to make an important contribution towards the achievement of Universal Health Coverage, the creation of decent jobs, and to inclusive and transformative economic growth."

The Commission had been established following United Nations General Assembly resolution A/RES/70/183, which recognized that "investing in new health workforce employment opportunities may also add broader socioeconomic value to the economy and contribute to the implementation for the 2030 Agenda for Sustainable Development" and requested the Secretary-General to "explore steps to meet the global shortfall of trained health workers". The Commission will be co-chaired by François Hollande, President of France, and Jacob Zuma, President of South Africa.

Approximately 25 Commissioners will soon be appointed to provide a balance of policy, technical and geographical expertise, from the education, employment, health and foreign affairs sectors of government, as well as representation from international organizations, academia, health-care professional associations, civil society and trade unions.

The Commission will hold its first meeting on 23 March, and will deliver its final report in the margin of the seventy-first regular session of the United Nations General Assembly in September.
Commission website: www.who.int/hrh/com-heeg/.

AERAS [to 5 March 2016]
http://www.aeras.org/pressreleases
March 1, 2016
Danilo Casimiro Joins Aeras as Chief Scientific Officer

Rockville, MD,– Aeras today announced that Danilo Casimiro, Ph.D., has joined the organization as Chief Scientific Officer (CSO) effective February 29. Dr. Casimiro joins Aeras from the Merck Research Laboratories, where he was Executive Director in the Department of Infectious Diseases and Vaccine Research.

"Danilo Casimiro has dedicated his career to developing vaccines to combat many major human health issues and we are delighted he will be leading Aeras's scientific strategy to develop a new, effective tuberculosis (TB) vaccine," said Jacqueline E. Shea, Ph.D., Aeras Chief Executive Officer. "As a prominent and highly respected scientific leader, Dr. Casimiro brings a broad-ranging wealth of vaccine discovery and development experience and shares our passion and commitment to TB vaccine development and to global health."

Dr. Casimiro will be filling the position recently vacated by Thomas G. Evans, M.D., who was formerly Aeras CEO and has been serving as Acting Chief Scientific Officer during the search for a permanent CSO…

Global Fund [to 5 March 2016]
http://www.theglobalfund.org/en/news/
News
Major Pledge by European Commission Signals Strong Replenishment for the Global Fund
03 March 2016

BRUSSELS – The European Commission announced a pledge of €470 million for the Global Fund to Fight AIDS, Tuberculosis and Malaria for the three-year period beginning in 2017, an increase of €100 million, or 27 percent, over their previous contribution.

The pledge signals the European Commission's strong leadership in global health, and marked the first pledge for the Global Fund's Fifth Replenishment, a funding cycle covering the years 2017 through 2019.

"One of the lessons of the Ebola outbreak in West Africa is the clear need to strengthen health systems in developing countries, so that infectious diseases can be controlled for good," said Neven Mimica, EU Commissioner for International Cooperation and Development.

"With €470 million, the EU's contribution to the Global Fund will contribute to achieve our shared ambition to save 8 million more lives and avert up to 300 million infections," Commissioner Mimica said. "I call on others to raise their contributions so that more resilient systems can be built, and the special needs of women and girls and those of key affected populations be better served."…

PATH [to 5 March 2016]
http://www.path.org/news/index.php
Press release | March 03, 2016
Woman's Condom achieves WHO/UNFPA prequalification

An important step toward increasing global access to next-generation female condom
February 2016

Press release | February 26, 2016
Leading health innovator PATH partners with Johnson & Johnson Vietnam to reduce childhood tuberculosis

New initiative builds on PATH's longstanding commitment to support Vietnam's tuberculosis control efforts

IAVI International AIDS Vaccine Initiative [to 5 March 2016]
http://www.iavi.org/press-releases/2016
February 24, 2016
Two novel HIV vaccine platforms demonstrate immunogenicity and good safety profile in phase I clinical study

Data published this month demonstrated the immunogenicity and good safety profile of two novel platforms for potential use in a preventive AIDS vaccine.

The vaccine candidates, based on vectors made from adenovirus serotype 26 (Ad26) and adenovirus serotype 35 (Ad35), respectively, each contained synthetic versions of HIV's envelope protein:
Assessment of the Safety and Immunogenicity of 2 Novel Vaccine Platforms for HIV-1 Prevention, Annals of Internal Medicine, 2 February 2016

European Medicines Agency [to 5 March 2016]
http://www.ema.europa.eu/
03/03/2016
Guidance for the publication of clinical data
Requirements for industry now available on submission of clinical data for publication
The European Medicines Agency (EMA) has published detailed guidance for pharmaceutical companies on the requirements to comply with its policy on the publication of clinical data.
EMA's pioneering policy entered into force on 1 January 2015 and applies to clinical reports contained in all marketing-authorisation applications submitted on or after this date. The first reports are currently foreseen to be publicly available in September 2016.
"With this guidance, the Agency is moving towards the operational implementation of its proactive publication policy, which launched a new era of transparency," says Noël Wathion, EMA's Deputy Executive Director. "The guidance will ensure that companies are aware of what is expected of them and are ready for the publication of these critical data."…

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UNICEF [to 5 March 2016]
http://www.unicef.org/media/media_89711.html
No new digest content identified.

IVI [to 5 March 2016]
http://www.ivi.org/web/www/home
No new digest content identified.

BMGF - Gates Foundation [to 5 March 2016]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

Gavi [to 5 March 2016]
http://www.gavialliance.org/library/news/press-releases/
No new digest content identified.

Fondation Merieux [to 5 March 2016]
Mission: Contribute to global health by strengthening local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.
http://www.fondation-merieux.org/news
No new digest content identified.

National Foundation for Infectious Diseases (NFID) [to 5 March 2016]

http://www.nfid.org/newsroom/press-releases
No new digest content identified.

IVAC [International Vaccine Access Center] [to 5 March 2016]
http://www.jhsph.edu/research/centers-and-institutes/ivac/about-us/news.html
No new digest content identified.

European Vaccine Initiative [to 5 March 2016]
http://www.euvaccine.eu/news-events
No new digest content identified.

NIH [to 5 March 2016]
http://www.nih.gov/news/releases.htm
No new digest content identified.

EDCTP [to 5 March 2016]
http://www.edctp.org/
The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials.
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

Defeating Meningitis in Africa

Chris Elias, President of Global Development at the Bill & Melinda Gates Foundation.
Project Syndicate | 2 March 2016

SEATTLE – Africa's progress in fighting meningitis A is one of the best-kept secrets in global health. Thanks to the development and deployment of a low-cost vaccine, the lives of hundreds of thousands of children have been saved, and communities that might otherwise have been devastated by the illness are thriving….

…The MVP stands as a powerful example of what is possible when African leaders and experts from across the spectrum of global health work together. Strong, temporary partnerships, with a focused goal, can have truly catalytic effects. But the work is far from over. Last year, the WHO approved MenAfriVac for use in regular vaccine schedules, making it possible for millions more to be protected.

The stakes are high. Universal access to immunization is a cornerstone of health, development, and economic growth. Recognizing this, several African countries are already

making plans to roll out meningitis – and other – vaccines into routine immunization systems this year. The task before African leaders is to ensure a smooth and full transition from mass vaccination campaigns to routine immunization.

Last week, government officials assembled in Ethiopia for the first-ever Ministerial Conference on Immunization in Africa, where they re-committed to ensuring that everyone on the continent has access to the vaccines they need. This will require further investment in immunization, improved data collection and analytics, new tools and approaches, and most importantly, strong partnerships.

We must build on the legacy of the MVP and work toward a world in which every child receives the life-saving vaccines they need to survive and thrive.

National Vaccine Program Office (NVPO) [U.S.]
http://www.hhs.gov/nvpo/
Funding Opportunity Announcement
Now accepting applications for a vaccine confidence research funding opportunity. Application deadline is April 8, 2016. Learn more.

* * * *

Journal Watch

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

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

American Journal of Infection Control
February 2016 Volume 44, Issue 2, p125-252, e9-e14
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
March 2016 Volume 50, Issue 3, p295-426, e65-e90
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 106, Issue 3 (March 2016)
http://ajph.aphapublications.org/toc/ajph/current

[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
March 2016; 94 (3)
http://www.ajtmh.org/content/current
Perspective Piece
Travel Vaccines Enter the Digital Age: Creating a Virtual Immunization Record
Kumanan Wilson, Katherine M. Atkinson, and Cameron P. Bell
Am J Trop Med Hyg 2016 94:485-488; Published online December 28, 2015, doi:10.4269/ajtmh.15-0510
Abstract
At present, proof of immunization against diseases such as yellow fever is required at some international borders in concordance with the International Health Regulations. The current standard, the International Certificate of Vaccination or Prophylaxis (ICVP), has limitations as a paper record including the possibility of being illegible, misplaced, or damaged. We believe that a complementary, digital record would offer advantages to public health and travelers alike. These include enhanced availability and reliability, potential to include lot specific information, and integration with immunization information systems. Challenges exist in implementation, particularly pertaining to verification at border crossings. We describe a potential course for the development and implementation of a digital ICVP record.

Articles
Community Attitudes Toward Mass Drug Administration for Control and Elimination of Neglected Tropical Diseases After the 2014 Outbreak of Ebola Virus Disease in Lofa County, Liberia
Joshua Bogus, Lincoln Gankpala, Kerstin Fischer, Alison Krentel, Gary J. Weil, Peter U. Fischer, Karsor Kollie, and Fatorma K. Bolay
Am J Trop Med Hyg 2016 94:497-503; Published online December 14, 2015, doi:10.4269/ajtmh.15-0591
Abstract
The recent outbreak of Ebola virus disease (EVD) interrupted mass drug administration (MDA) programs to control and eliminate neglected tropical diseases in Liberia. MDA programs treat entire communities with medication regardless of infection status to interrupt transmission and eliminate lymphatic filariasis and onchocerciasis. Following reports of hostilities toward health workers and fear that they might be spreading EVD, it was important to determine whether attitudes toward MDA might have changed after the outbreak. We surveyed 140 community leaders from 32 villages in Lofa County, Liberia, that had previously participated in MDA and are located in an area that was an early epicenter of the EVD outbreak. Survey respondents reported a high degree of community trust in the MDA program, and 97% thought their communities were ready to resume MDA. However, respondents predicted that fewer people would comply with MDA after the EVD epidemic than before. The survey also uncovered fears in the community that EVD and MDA might be linked. Respondents suggested that MDA programs emphasize to people that the medications are identical to those previously distributed and that MDA programs have nothing to do with EVD.

Articles

Diarrhea Prevalence, Care, and Risk Factors Among Poor Children Under 5 Years of Age in Mesoamerica

Danny V. Colombara, Bernardo Hernández, Claire R. McNellan, Sima S. Desai, Marielle C. Gagnier, Annie Haakenstad, Casey Johanns, Erin B. Palmisano, Diego Ríos-Zertuche, Alexandra Schaefer, Paola Zúñiga-Brenes, Nicholas Zyznieuski, Emma Iriarte, and Ali H. Mokdad
Am J Trop Med Hyg 2016 94:544-552; Published online January 19, 2016, doi:10.4269/ajtmh.15-0750

Abstract

Care practices and risk factors for diarrhea among impoverished communities across Mesoamerica are unknown. Using Salud Mesoamérica Initiative baseline data, collected 2011–2013, we assessed the prevalence of diarrhea, adherence to evidence-based treatment guidelines, and potential diarrhea correlates in poor and indigenous communities across Mesoamerica. This study surveyed 14,500 children under 5 years of age in poor areas of El Salvador, Guatemala, Mexico (Chiapas State), Nicaragua, and Panama. We compared diarrhea prevalence and treatment modalities using $\chi 2$ tests and used multivariable Poisson regression models to calculate adjusted risk ratios (aRRs) and 95% confidence intervals (CIs) for potential correlates of diarrhea. The 2-week point prevalence of diarrhea was 13% overall, with significant differences between countries ($P < 0.05$). Approximately one-third of diarrheal children were given oral rehydration solution and less than 3% were given zinc. Approximately 18% were given much less to drink than usual or nothing to drink at all. Antimotility medication was given to 17% of diarrheal children, while antibiotics were inappropriately given to 36%. In a multivariable regression model, compared with children 0–5 months, those 6–23 months had a 49% increased risk for diarrhea (aRR = 1.49, 95% CI = 1.15, 1.95). Our results call for programs to examine and remedy low adherence to evidence-based treatment guidelines.

Annals of Internal Medicine
1 March 2016, Vol. 164. No. 5
http://annals.org/issue.aspx

Original Research

Assessment of the Safety and Immunogenicity of 2 Novel Vaccine Platforms for HIV-1 Prevention: A Randomized Trial

FREE

Lindsey R. Baden, MD; Etienne Karita, MD; Gaudensia Mutua, MBChB; Linda-Gail Bekker, MD; Glenda Gray, MBBCh; Liesl Page-Shipp, MD; Stephen R. Walsh, MD; Julien Nyombayire, MD; Omu Anzala, MBChB, PhD; Surita Roux, MD; Fatima Laher, MBBCh; Craig Innes, MD; Michael S. Seaman, PhD; Yehuda Z. Cohen, MD; Lauren Peter; Nicole Frahm, PhD; M. Juliana McElrath, MD, PhD; Peter Hayes, PhD; Edith Swann, PhD; Nicole Grunenberg, MD; Maria Grazia-Pau, MSc; Mo Weijtens, PhD; Jerry Sadoff, MD; Len Dally, MSc; Angela Lombardo, PhD; Jill Gilmour, PhD; Josephine Cox, PhD; Raphael Dolin, MD; Patricia Fast, MD, PhD; Dan H. Barouch, MD, PhD; Dagna S. Laufer, MD, for the B003-IPCAVD004-HVTN091 Study Group

Abstract

Background: A prophylactic HIV-1 vaccine is a global health priority.
Objective: To assess a novel vaccine platform as a prophylactic HIV-1 regimen.
Design: Randomized, double-blind, placebo-controlled trial. Both participants and study personnel were blinded to treatment allocation. (ClinicalTrials.gov: NCT01215149)
Setting: United States, East Africa, and South Africa.
Patients: Healthy adults without HIV infection.

Intervention: 2 HIV-1 vaccines (adenovirus serotype 26 with an HIV-1 envelope A insert [Ad26.EnvA] and adenovirus serotype 35 with an HIV-1 envelope A insert [Ad35.Env], both administered at a dose of 5 × 1010 viral particles) in homologous and heterologous combinations.
Measurements: Safety and immunogenicity and the effect of baseline vector immunity.
Results: 217 participants received at least 1 vaccination, and 210 (>96%) completed follow-up. No vaccine-associated serious adverse events occurred. All regimens were generally well-tolerated. All regimens elicited humoral and cellular immune responses in nearly all participants. Preexisting Ad26- or Ad35-neutralizing antibody titers had no effect on vaccine safety and little effect on immunogenicity. In both homologous and heterologous regimens, the second vaccination significantly increased EnvA antibody titers (approximately 20-fold from the median enzyme-linked immunosorbent assay titers of 30–300 to 3000). The heterologous regimen of Ad26–Ad35 elicited significantly higher EnvA antibody titers than Ad35–Ad26. T-cell responses were modest and lower in East Africa than in South Africa and the United States.
Limitations: Because the 2 envelope inserts were not identical, the boosting responses were complex to interpret. Durability of the immune responses elicited beyond 1 year is unknown.
Conclusion: Both vaccines elicited significant immune responses in all populations. Baseline vector immunity did not significantly affect responses. Second vaccinations in all regimens significantly boosted EnvA antibody titers, although vaccine order in the heterologous regimen had a modest effect on the immune response.
Primary Funding Source: International AIDS Vaccine Initiative, National Institutes of Health, Ragon Institute, Crucell Holland.

Ideas and Opinions
Interrupting Ebola Transmission in Liberia Through Community-Based Initiatives
Mosoka Fallah, PhD, MPH; Bernice Dahn, MD, MPH; Tolbert G. Nyenswah, Esq, MPH; Moses Massaquoi, MD, MPH; Laura A. Skrip, MPH; Dan Yamin, PhD; Martial Ndeffo Mbah, PhD; Netty Joe, MD; Siedoh Freeman, MD; Thomas Harris, BA; Zinnah Benson, BBA; and Alison P. Galvani, PhD

In Liberia, programs based on community engagement were effective in controlling the Ebola virus disease epidemic. This article details the community-based initiative that was instrumental to the shift in transmission dynamics.

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 5 March 2016)
[No new relevant content identified]

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 5 March 2016)
Debate
Implications of prioritizing HIV cure: new momentum to overcome old challenges in HIV

Curing HIV is a new strategic priority for several major AIDS organizations. In step with this new priority, HIV cure research and related programs are advancing in low, middle, and high-income country settings...
Joseph D. Tucker, Adam Gilbertson, Ying-Ru Lo and Marco Vitória
BMC Infectious Diseases 2016 16:109
Published on: 3 March 2016

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 5 March 2016)
Research article
Qualitative study on custodianship of human biological material and data stored in biobanks
Michiel Verlinden, Herman Nys, Nadine Ectors and Isabelle Huys
Published on: 1 March 2016
Abstract
Background
Balancing the rights and obligations of custodians and applicants in relation to access to biobanks is of utmost importance to guarantee trust and confidence. This study aimed to reveal which issues divide different stakeholders in an attempt to determine the rights and/or obligations held on human biological materials (HBM) and data.
Methods
Twenty-eight informants in the Benelux and Scandinavia were interviewed in order to capture the perspectives of experts and stakeholders in relation to the rights and obligations held by custodians and applicants with respect to access to HBM and data.
Results
There was no consensus among the informants on whether the custodian of a biobank should decide upon the scientific merits and the utility of an access request. Nearly all informants agreed that a new request or an amendment to the initial request has to be submitted when an applicant wants to use leftover HBM in a new or follow-up project. Several informants felt that it might be justified to charge higher access fees to external or industrial applicants that did not contribute (directly or indirectly) to the collection of HBM and data. Most informants agreed that a custodian of a biobank could request the sharing and return of research results. It was furthermore argued that some of the benefits of research projects should be fed back into biobanks.
Conclusions
The interviews revealed a rather complex web of rights and obligations allocated to the custodian and the applicant in relation to access to HBM and data stored in biobanks. Some rights and obligations are negotiated on a case-by-case basis, while others are stipulated in access arrangements. We did find a consensus on the attribution of certain general rights to the custodians and the applicant.

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 5 March 2016)
[No new relevant content identified]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 5 March 2016)
[No new relevant content identified]

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 5 March 2016)
Research article
Awareness and knowledge about human papillomavirus vaccination and its acceptance in China: a meta-analysis of 58 observational studies
The human papillomavirus (HPV) vaccines have been widely introduced in immunization programs worldwide, however, it is not accepted in mainland China…Low HPV vaccine awareness and knowledge was observed among the Chinese population. HPV vaccine awareness differed across sexes, ethnicities, and regions. Given the limited quality and number of studies included, further research with improved study design is necessary.
Yanru Zhang, Ying Wang, Li Liu, Yunzhou Fan, Zhihua Liu, Yueyun Wang and Shaofa Nie
BMC Public Health 2016 16:216
Published on: 3 March 2016

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 5 March 2016)
Research Article
Factors influencing willingness to participate in new drug trial studies: a study among parents whose children were recruited into these trials in northern Ghana
James Akazili, Samuel Chatio, Fabian Sebastian Achana, Abraham Oduro, Edmund W. Kanmiki and Frank Baiden
BMC Research Notes 2016 9:139
Published on: 3 March 2016
Abstract
Background
During the last decade, the number of clinical trials conducted in sub-Saharan Africa has increased significantly which has helped to address priority health problems in the region. Navrongo health research centre since it was established in 1989, has conducted several trial studies including rectal artesunate trial in the Kassena-Nankana districts. However, there is little evidence-based for assessing the impact of new drug trials. This study explored factors that motivate parents to allow their children to participate in new drug trials in northern Ghana.
Method
The study used both quantitative and qualitative methods. The participants were randomly selected from among parents whose children were enrolled in a new drug trial conducted in the Kassena-Nankana districts between 2000 and 2003. QSR Nvivo 9 software was used to code the qualitative data into themes before analysis while STATA software Version 11.2© was used to analyze the quantitative data.

Results
The results showed that majority (95.9 %) of the parents were willing to allow their children to be enrolled in future new drug trials. The main factors motivating their willingness to allow their children to be enrolled in these trials were quality of health care services offered to trial participants (92.9 %), detail medical examination (90.8 %), promptness of care provided (94.4 %) and quality of drugs (91.9 %). Other factors mentioned included disease prevention (99.5 %) and improved living standard (96.1 %). Parents reported that the conduct of these trials had reduced the frequency of disease occurrences in the communities because of the quality of health care services provided to the children recruited into these trial studies.
Conclusion
Though the implementation of clinical trials in the study area is believed to have positive impact on health status of people particularly trial participants, measures should however be taken to address safety and likely side effects of new drugs given to trial participants during these trial studies.

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 5 March 2016)
[No new content]

BMJ Open
2016, Volume 6, Issue 3
http://bmjopen.bmj.com/content/current
[New issue; No new relevant content identified]

British Medical Journal
5 March 2016 (vol 352, issue 8047)
http://www.bmj.com/content/352/8047
[No new relevant content identified]

Bulletin of the World Health Organization
Volume 94, Number 3, March 2016, 157-232
http://www.who.int/bulletin/volumes/94/3/en/
EDITORIALS
Data sharing in public health emergencies: a call to researchers
Christopher Dye, Kidist Bartolomeos, Vasee Moorthy & Marie Paule Kieny
http://dx.doi.org/10.2471/BLT.16.170860

Measuring quality-of-care in the context of sustainable development goal 3: a call for papers
Yoko Akachi, Finn Tarp, Edward Kelley, Tony Addison & Margaret E Kruk
http://dx.doi.org/10.2471/BLT.16.170605

POLICY & PRACTICE

Psychosocial effects of an Ebola outbreak at individual, community and international levels
Tine Van Bortel, Anoma Basnayake, Fatou Wurie, Musu Jambai, Alimamy Sultan Koroma, Andrew T Muana, Katrina Hann, Julian Eaton, Steven Martin & Laura B Nellums
http://dx.doi.org/10.2471/BLT.15.158543

Clinical Infectious Diseases (CID)
Volume 62 Issue 6 March 15, 2016
http://cid.oxfordjournals.org/content/current
VIEWPOINTS
Toward Earlier Inclusion of Pregnant and Postpartum Women in Tuberculosis Drug Trials: Consensus Statements From an International Expert Panel
Amita Gupta, Jyoti S. Mathad, Susan M. Abdel-Rahman, Jessica D. Albano, Radu Botgros, Vikki Brown, Renee S. Browning, Liza Dawson, Kelly E. Dooley, Devasena Gnanashanmugam, Beatriz Grinsztejn, Sonia Hernandez-Diaz, Patrick Jean-Philippe, Peter Kim, Anne D. Lyerly, Mark Mirochnick, Lynne M. Mofenson, Grace Montepiedra, Jeanna Piper, Leyla Sahin, Radojka Savic, Betsy Smith, Hans Spiegel, Soumya Swaminathan, D. Heather Watts, and Amina White
Clin Infect Dis. (2016) 62 (6): 761-769 doi:10.1093/cid/civ991
Consensus statements from an expert panel to include pregnant and postpartum women in tuberculosis drug trials note high-priority research areas: preventing latent tuberculosis infection progression; evaluating new drugs for multidrug-resistant tuberculosis; and safety and pharmacokinetic data for current tuberculosis drugs.

Clinical Therapeutics
February 2016 Volume 38, Issue 2, p233-428
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

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

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 5 March 2016]
[No new content]

Contemporary Clinical Trials
Volume 47, In Progress (March 2016)
http://www.sciencedirect.com/science/journal/15517144/47
[Reviewed earlier]

Current Opinion in Infectious Diseases
April 2016 - Volume 29 - Issue 2 pp: v-v,99-228
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
RESPIRATORY INFECTIONS
Pneumococcal vaccination
Cillóniz, Catia; Amaro, Rosanel; Torres, Antoni
Abstract
Purpose of review: Pneumococcal diseases (invasive diseases, pneumonia, otitis media, and sinusitis) are among the most frequent preventable infectious diseases carrying a very high morbidity and case fatality rate worldwide. Pneumococcal vaccination is a key element to reduce the global burden of the disease in children and adult population. Our aim is to discuss current knowledge of the epidemiology of pneumococcal disease and pneumococcal vaccines.
Recent findings:
After the introduction of conjugate vaccines (PCV7 and PCV13), rates of pneumococcal diseases because of vaccine serotypes have decreased considerably among children in the vaccine target and among nonvaccinated children and adults. Results of the Community-Acquired Pneumonia Immunization Trial in Adults demonstrated 45.6% efficacy of PCV13 against the first episode of pneumonia, 45% against first-episode nonbacteremic pneumococcal pneumonia, and 75% against the first episode of invasive pneumococcal diseases in adults older than 65 years. Recommendations for pneumococcal vaccination have changed recently in both the United States and Europe.
Summary:
The changing epidemiology of pneumococcal diseases should be closely investigated to assess the effectiveness and the usefulness of the current vaccination policies, and to identify future directions for preventing pneumococcal infections.

Developing World Bioethics
April 2016 Volume 16, Issue 1 Pages 1–60
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-1/issuetoc
EDITORIAL
Future Infectious Disease Outbreaks: Ethics of Emergency Access to Unregistered Medical Interventions and Clinical Trial Designs (pages 2–3)
Udo Schuklenk
Article first published online: 19 JAN 2016 | DOI: 10.1111/dewb.12102
[No abstract]

Against Permitted Exploitation in Developing World Research Agreements (pages 36–44)
Danielle M. Wenner
Article first published online: 17 FEB 2015 | DOI: 10.1111/dewb.12081
Abstract
This paper examines the moral force of exploitation in developing world research agreements. Taking for granted that some clinical research which is conducted in the developing world but funded by developed world sponsors is exploitative, it asks whether a third party would be morally justified in enforcing limits on research agreements in order to ensure more fair and less exploitative outcomes. This question is particularly relevant when such exploitative

transactions are entered into voluntarily by all relevant parties, and both research sponsors and host communities benefit from the resulting agreements. I show that defenders of the claim that exploitation ought to be permitted rely on a mischaracterization of certain forms of interference as unjustly paternalistic and two dubious empirical assumptions about the results of regulation. The view I put forward is that by evaluating a system of constraints on international research agreements, rather than individual transaction-level interference, we can better assess the alternatives to permitting exploitative research agreements.

Maintaining Research Integrity While Balancing Cultural Sensitivity: A Case Study and Lessons From the Field (pages 55–60)
Rebekah Sibbald, Bethina Loiseau, Benedict Darren, Salem A. Raman, Helen Dimaras and Lawrence C. Loh
Article first published online: 11 SEP 2015 | DOI: 10.1111/dewb.12089
Abstract
Contemporary emphasis on creating culturally relevant and context specific knowledge increasingly drives researchers to conduct their work in settings outside their home country. This often requires researchers to build relationships with various stakeholders who may have a vested interest in the research. This case study examines the tension between relationship development with stakeholders and maintaining study integrity, in the context of potential harms, data credibility and cultural sensitivity. We describe an ethical breach in the conduct of global health research by a arising from the ad-hoc participation of a community stakeholder external to the visiting research group. A framework for reflection is developed from a careful examination of underlying factors and presented with a discussion of consequences and mitigation measures. This framework aims to present lessons learned for researchers working abroad who might face similar situations in their work.

Development in Practice
Volume 26, Issue 2, 2016
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

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

Emerging Infectious Diseases
Volume 22, Number 2—February 2016
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

Epidemics
Volume 15, In Progress (June 2016)
http://www.sciencedirect.com/science/journal/17554365

[No new relevant content]

Epidemiology and Infection
Volume 144 - Issue 04 - March 2016
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
[Reviewed earlier]

The European Journal of Public Health
Volume 26, Issue 1, 1 February 2016
http://eurpub.oxfordjournals.org/content/26/1
[Reviewed earlier]

Eurosurveillance
Volume 21, Issue 9, 03 March 2016
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Rapid communications
Zika virus detection in urine from patients with Guillain-Barré syndrome on Martinique, January 2016
by B Rozé, F Najioullah, J Fergé, K Apetse, Y Brouste, R Cesaire, C Fagour, L Fagour, P Hochedez, S Jeannin, J Joux, H Mehdaoui, R Valentino, A Signate, A Cabié, on behalf of the GBS Zika Working Group

Surveillance report
The measles outbreak in Bulgaria, 2009–2011: An epidemiological assessment and lessons learnt
by M Muscat, L Marinova, A Mankertz, N Gatcheva, Z Mihneva, S Santibanez, A Kunchev, R Filipova, M Kojouharova

Global Health: Science and Practice (GHSP)
December 2015 | Volume 3 | Issue 4
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Health Governance
http://blogs.shu.edu/ghg/category/complete-issues/spring-autumn-2014/
[Accessed 5 March 2016]
[No new content]

Global Public Health
Volume 11, Issue 4, 2016
http://www.tandfonline.com/toc/rgph20/current
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 5 March 2016]
[No new content]

Health Affairs
February 2016; Volume 35, Issue 2
http://content.healthaffairs.org/content/current
Issue Focus: Vaccines
[Reviewed earlier]

Health and Human Rights
Volume 17, Issue 2 December 2015
http://www.hhrjournal.org/
Special Issue: Evidence of the Impact of Human Rights-Based Approaches to Health
[Reviewed earlier]

Health Economics, Policy and Law
Volume 11 - Issue 02 - April 2016
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[New issue; No relevant content identified]

Health Policy and Planning
Volume 31 Issue 3 April 2016
http://heapol.oxfordjournals.org/content/current
[New issue; No relevant content identified]

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 5 March 2016]
[No new relevant content identified]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 12, Issue 1, 2016
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

Humanitarian Exchange Magazine
Number 65 November 2015

http://odihpn.org/wp-content/uploads/2015/10/HE_65_web.pdf
Special Feature: The Crisis in Iraq
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 5 March 2016]
[No new relevant content]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 5 March 2016]
[No new content]

International Health
Volume 8 Issue 2 February 2016
http://inthealth.oxfordjournals.org/content/current
REVIEWS
Spillover effect of HIV-specific foreign aid on immunization services in Nigeria
Charles C. Chima and Luisa Franzini
Abstract
Background Health aid to Nigeria increased tremendously in the last decade and a significant portion of the funds were earmarked for HIV-associated programs. Studies on the impact of HIV-specific aid on the delivery of non-HIV health services in sub-Saharan Africa have yielded mixed results. This study assessed if there is a spillover effect of HIV-specific aid on childhood vaccinations in Nigeria.
Methods Multivariate logistic regression models were used to estimate the effect of aid disbursements in a previous year on the receipt of vaccines at the individual level in a given year. Estimations were done for approximately 11 700 children using data from demographic and health surveys conducted in Nigeria in 2003 and 2008.
Results US$1 increase in HIV aid per capita was associated with a decrease in the probability of receipt of vaccines by 8–31%: polio first dose decreased by 8%; polio final dose by 9%; diphtheria-pertussis-tetanus (DPT) first dose by 11%; DPT final dose by 19%; measles by 31%; final doses of polio and DPT plus measles vaccine by 8%.
Conclusions HIV-specific aid had a negative spillover effect on immunization services in Nigeria over the study period. Donors may need to rethink their funding strategies in favour of more horizontal approaches.

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

International Journal of Infectious Diseases
February 2016 Volume 43, p1-110
http://www.ijidonline.com/current
[Reviewed earlier]

JAMA
March 1, 2016, Vol 315, No. 9
http://jama.jamanetwork.com/issue.aspx
Viewpoint
The Emerging Zika Pandemic: Enhancing Preparedness
Daniel R. Lucey, MD, MPH; Lawrence O. Gostin, JD
Extract
This Viewpoint discusses Zika virus infection and health system preparedness and urges the World Health Organization to proactively respond to the growing global threat of infection.

The Zika virus (ZIKV), a flavivirus related to yellow fever, dengue, West Nile, and Japanese encephalitis, originated in the Zika forest in Uganda and was discovered in a rhesus monkey in 1947. The disease now has "explosive" pandemic potential, with outbreaks in Africa, Southeast Asia, the Pacific Islands, and the Americas.1 Since Brazil reported Zika virus in May 2015, infections have occurred in at least 20 countries in the Americas.2 Puerto Rico reported the first locally transmitted infection in December 2015, but Zika is likely to spread to the United States. The Aedes species mosquito (an aggressive daytime biter) that transmits Zika virus (as well as dengue, chikungunya, and yellow fever) occurs worldwide, posing a high risk for global transmission. Modeling anticipates significant international spread by travelers from Brazil to the rest of the Americas, Europe, and Asia.3 What steps are required now to shore up preparedness in the Americas and worldwide?...

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

Journal of Community Health
Volume 41, Issue 2, April 2016
http://link.springer.com/journal/10900/41/2/page/1
Commentary
Taxi Drivers: A Target Population for the Prevention of Transmissible Disease?
Heather M. Limper, Jennifer L. Burns, Kenneth A. Alexander
Abstract
We set out to assess the feasibility and uptake of an on-site influenza vaccination campaign targeting taxi drivers in airport taxicab lots in Chicago, Illinois. Influenza vaccine was provided by the Chicago Department of Public Health as this event aligned with ongoing efforts to provide influenza vaccinations throughout the city. Clinicians and clinic support staff were volunteers recruited from the University of Chicago Medicine and incorporated nursing staff, physicians, physician residents, and administrative support. Together, this allowed for a cost-effective approach to provide free influenza vaccines to the primarily uninsured taxi driver

population. During these events, 545 taxi drivers received influenza vaccine in 2012 while 354 drivers were immunized in 2013. Nearly all drivers reported uninsured or under-insured status. The ability to use volunteers and healthcare organization's desires to meet the needs of the community, in collaboration with often under-staffed but highly dedicated local health departments have the potential to offer valuable public health services to underserved members of the community. Educational initiatives targeting vaccine hesitancy and misinformation may be necessary to improve immunization coverage among this population.

Original Paper

Effects of Community Health Nurse-Led Intervention on Childhood Routine Immunization Completion in Primary Health Care Centers in Ibadan, Nigeria

V. B. Brown, O. A. Oluwatosin, J. O. Akinyemi, A. A. Adeyemo

Abstract

Immunization coverage of vulnerable children is often sub-optimal in many low- and middle-income countries. The use of a reminder/recall (R/R) system has been one of the strategies shown to be effective in improving immunization rates. In the resent study, we evaluated the effect of R/R and Primary Health Care Immunization Providers' Training (PHCIPT) intervention on routine immunization completion among 595 infants in Ibadan, Nigeria. The design was a group randomized controlled trial with Local Government Area (LGA) being the unit of randomization. Four randomly selected LGAs were randomized to receive a cellphone R/R only (A), a PHCIPT only (B); combined R/R and PHCIPT (C) intervention or serve as a control group (D). Children aged 0–12 weeks were consecutively recruited into each group and followed up for 12 months. The primary outcome measure was routine immunization completion at 12 months of age. At the study endpoint, immunization completion rates were: group A, 98.6 %; group B, 70 %; group C, 97.3 %; and group D, 57.3 %. Compared to the control group, the cellphone R/R group was 72 % (RR 1.72, 95 % CI 1.50–1.98) and the combined RR/PHCIPT group 70 % (RR 1.70, 95 % CI 1.47–1.95) more likely to complete immunization. In contrast, immunization completion in the PHCIPT group was marginally different from the control group (RR 1.22, 95 % CI 1.03–1.45). These findings remained robust to adjustment for potential predictors of immunization completion as covariates. In conclusion, cellphone reminder/recall was effective in improving immunization completion in this Nigerian setting. Its use is recommended for large scale implementation

Original Paper

A Cluster-Randomized Trial to Evaluate a Mother–Daughter Dyadic Educational Intervention for Increasing HPV Vaccination Coverage in American Indian Girls

Rachel L. Winer, Angela A. Gonzales, Carolyn J. Noonan…

Abstract

We evaluated whether delivering educational presentations on human papillomavirus (HPV) to American Indian mothers affected HPV vaccination rates in their adolescent daughters. In March–April 2012, we recruited Hopi mothers or female guardians with daughters aged 9–12 years for a cluster-randomized intervention study on the Hopi Reservation. Participants attended mother-daughter dinners featuring educational presentations for mothers on either HPV (intervention) or juvenile diabetes (control) and completed baseline surveys. Eleven months later, we surveyed mothers on their daughters' HPV vaccine uptake. We also reviewed aggregated immunization reports from the Indian Health Service to assess community-level HPV vaccination coverage from 2007 to 2013. Ninety-seven mother-daughter dyads participated; nine mothers reported that their daughters completed the three-dose HPV vaccination series

before recruitment. Among the remaining mothers, 63 % completed the follow-up survey. Adjusting for household income, the proportion of daughters completing vaccination within 11 months post-intervention was similar in the intervention and control groups (32 vs. 28 %, adjusted RR = 1.2, 95 % confidence interval (CI) 0.6–2.3). Among unvaccinated daughters, those whose mothers received HPV education were more likely to initiate vaccination (50 vs. 27 %, adjusted RR = 2.6, 95 % CI 1.4–4.9) and complete three doses (adjusted RR = 4.0, 95 % CI 1.2–13.1) than girls whose mothers received diabetes education. Community-level data showed that 80 % of girls aged 13–17 years and 20 % of girls aged 11–12 completed the vaccination series by 2013. HPV vaccine uptake in Hopi girls aged 13–17 years is significantly higher than the U.S. national average. Brief educational presentations on HPV delivered to American Indian mothers might increase HPV vaccination rates in daughters aged 9–12 years.

Journal of Epidemiology & Community Health
March 2016, Volume 70, Issue 3
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 11, Issue 3, 2015
http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8
Forum: The Sustainable Development Goals
[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)
January-March 2016 Volume 8 | Issue 1 Page Nos. 1-56
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 27, Number 1, February 2016
https://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.27.1.html
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 18, Issue 1, February 2016
http://link.springer.com/journal/10903/18/1/page/1
[Reviewed earlier]

Journal of Immigrant & Refugee Studies
Volume 13, Issue 4, 2015
http://www.tandfonline.com/toc/wimm20/current

[Reviewed earlier]

Journal of Infectious Diseases
Volume 213 Issue 7 April 1, 2016
http://jid.oxfordjournals.org/content/current
[New issue; No relevant content identified]

The Journal of Law, Medicine & Ethics
Winter 2015 Volume 43, Issue 4 Pages 673–913
http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-4/issuetoc
Special Issue: SYMPOSIUM: Harmonizing Privacy Laws to Enable International Biobank Research: Part I
[14 articles]
[Reviewed earlier]

Journal of Medical Ethics
March 2016, Volume 42, Issue 3
http://jme.bmj.com/content/current
[New issue; No relevant content identified]

Journal of Medical Microbiology
Volume 65, Issue 2, February 2016
http://jmm.microbiologyresearch.org/content/journal/jmm/65/2;jsessionid=6i2bjt9ki4ncd.x-sgm-live-03
[New issue; No relevant content identified]

Journal of Patient-Centered Research and Reviews
Volume 3, Issue 1 (2016)
http://digitalrepository.aurorahealthcare.org/jpcrr/
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 5 Issue 1 March 2016
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Pediatrics
March 2016 Volume 170, p1-350
http://www.jpeds.com/current
[Reviewed earlier]

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

Journal of the Royal Society – Interface
01 January 2016; volume 13, issue 114
http://rsif.royalsocietypublishing.org/content/current
[Reviewed earlier]

Journal of Virology
March 2016, volume 90, issue 6
http://jvi.asm.org/content/current
[New issue; Nor relevant content identified]

The Lancet
Mar 05, 2016 Volume 387 Number 10022 p917-1026 e22
http://www.thelancet.com/journals/lancet/issue/current
Editorial
Health—an explicit human right
The Lancet
Summary
"The past year severely tested the international system's capacity to respond to crises and mass forced displacements of people, and found it woefully inadequate." So begins Amnesty International's annual report for 2015, The state of the world's human rights, published last week. Set against the backdrop of unprecedented and worldwide migration, recurring themes include access to health services, the effects of conflict on health, women and children's health, sexual rights, and the denial of health care in prisons.

Comment
Zika virus and microcephaly in Brazil: a scientific agenda
Mauricio L Barreto, Manoel Barral-Netto, Rodrigo Stabeli, Naomar Almeida-Filho, Pedro F C Vasconcelos, Mauro Teixeira, Paulo Buss, Paulo E Gadelha
Summary
Since 1981, the Brazilian population has had dengue fever epidemics and all control efforts have been unsuccessful.1 In 2014, chikungunya fever was reported for the first time in the country.2 In 2015, the occurrence of Zika virus was also reported,3 along with an increase of microcephaly and brain damage in newborn babies.4,5 The mosquito Aedes aegypti is the most conventional vector of these three viral infections and is widely disseminated in a great part of urban Brazil. Brazilian public health authorities declared a National Public Health Emergency on Nov 11, 2015, and intensified the vector control campaign to tackle the epidemic.

The Lancet Infectious Diseases

Mar 2016 Volume 16 Number 3 p265-384 e11-e33
http://www.thelancet.com/journals/laninf/issue/current
Editorial
Zika virus in the dock
The Lancet Infectious Diseases
DOI: http://dx.doi.org/10.1016/S1473-3099(16)00085-2
Summary
In October, 2015, the Ministry of Health in Brazil reported an unexplained increase in cases of microcephaly, a congenital malformation normally associated with incomplete brain development, in newborn babies (4783 cases vs 150 in the previous year). The reported cases have caused widespread fear among pregnant women all over South and Central America, to the point that some nations such as Ecuador have recommended that their citizens postpone pregnancy to 2018, to give time to investigate the causes of the increase of microcephaly cases.

Articles
H7N9 live attenuated influenza vaccine in healthy adults: a randomised, double-blind, placebo-controlled, phase 1 trial
Larisa Rudenko, Irina Isakova-Sivak, Anatoly Naykhin, Irina Kiseleva, Marina Stukova, Mariana Erofeeva, Daniil Korenkov, Victoria Matyushenko, Erin Sparrow, Marie-Paule Kieny
Summary
Background
H7N9 avian influenza viruses characterised by high virulence and presence of mammalian adaptation markers have pandemic potential. Specific influenza vaccines remain the main defence. We assessed the safety and immunogenicity of an H7N9 live attenuated influenza vaccine (LAIV) candidate in healthy adult volunteers.
Methods
We did a phase 1, double-blind, randomised, placebo-controlled trial in Saint Petersburg, Russia. Eligible participants were healthy adults aged 18–49 years. The participants were randomised 3:1 to receive live vaccine or placebo, according to a computer-generated randomisation scheme. Two doses of vaccine or placebo were administered intranasally 28 days apart, each followed by 7 day stays in hospital. Immune responses were assessed in nasal swabs, saliva, and serum specimens collected before and 28 days after each vaccine dose. The primary outcome was the safety profile. This trial is registered with ClinicalTrials.gov, number NCT02480101.
Findings
Between Oct 21, 2014, and Oct 31, 2014, 40 adults were randomised, of whom 39 (98%) were included in the per-protocol analysis (29 in the vaccine group and ten in the placebo group). The frequency of adverse events did not differ between the vaccine and placebo groups. Seroconversion of neutralising antibodies was seen in 14 participants after the first vaccine dose (48%, 95% CI 29·4–67·5) and 21 after the second vaccine dose (72%, 52·8–87·3). Immune responses were seen in 27 of 29 recipients (93%, 95% CI 77·2–99·2). Adverse effects were seen in 19 (63%) vaccine recipients and nine (90%) placebo recipients after the first dose and in nine (31%) and four (40%), respectively, after the second dose. These effects were mainly local and all were mild.
Interpretation
The H7N9 LAIV was well tolerated and safe and showed good immunogenicity.
Funding
WHO.

Safety and immunogenicity of a chimpanzee adenovirus-vectored Ebola vaccine in healthy adults: a randomised, double-blind, placebo-controlled, dose-finding, phase 1/2a study

Olga De Santis, Régine Audran, Emilie Pothin, Loane Warpelin-Decrausaz, Laure Vallotton, Grégoire Wuerzner, Camille Cochet, Daniel Estoppey, Viviane Steiner-Monard, Sophie Lonchampt, Anne-Christine Thierry, Carole Mayor, Robert T Bailer, Olivier Tshiani Mbaya, Yan Zhou, Aurélie Ploquin, Nancy J Sullivan, Barney S Graham, François Roman, Iris De Ryck, W Ripley Ballou, Marie Paule Kieny, Vasee Moorthy, François Spertini, Blaise Genton

Summary

Background

The ongoing Ebola outbreak led to accelerated efforts to test vaccine candidates. On the basis of a request by WHO, we aimed to assess the safety and immunogenicity of the monovalent, recombinant, chimpanzee adenovirus type-3 vector-based Ebola Zaire vaccine (ChAd3-EBO-Z).

Methods

We did this randomised, double-blind, placebo-controlled, dose-finding, phase 1/2a trial at the Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland. Participants (aged 18–65 years) were randomly assigned (2:2:1), via two computer-generated randomisation lists for individuals potentially deployed in endemic areas and those not deployed, to receive a single intramuscular dose of high-dose vaccine (5 × 1010 viral particles), low-dose vaccine (2·5 × 1010 viral particles), or placebo. Deployed participants were allocated to only the vaccine groups. Group allocation was concealed from non-deployed participants, investigators, and outcome assessors. The safety evaluation was not masked for potentially deployed participants, who were therefore not included in the safety analysis for comparison between the vaccine doses and placebo, but were pooled with the non-deployed group to compare immunogenicity. The main objectives were safety and immunogenicity of ChAd3-EBO-Z. We did analysis by intention to treat. This trial is registered with ClinicalTrials.gov, number NCT02289027.

Findings

Between Oct 24, 2014, and June 22, 2015, we randomly assigned 120 participants, of whom 18 (15%) were potentially deployed and 102 (85%) were non-deployed, to receive high-dose vaccine (n=49), low-dose vaccine (n=51), or placebo (n=20). Participants were followed up for 6 months. No vaccine-related serious adverse events were reported. We recorded local adverse events in 30 (75%) of 40 participants in the high-dose group, 33 (79%) of 42 participants in the low-dose group, and five (25%) of 20 participants in the placebo group. Fatigue or malaise was the most common systemic adverse event, reported in 25 (62%) participants in the high-dose group, 25 (60%) participants in the low-dose group, and five (25%) participants in the placebo group, followed by headache, reported in 23 (57%), 25 (60%), and three (15%) participants, respectively. Fever occurred 24 h after injection in 12 (30%) participants in the high-dose group and 11 (26%) participants in the low-dose group versus one (5%) participant in the placebo group. Geometric mean concentrations of IgG antibodies against Ebola glycoprotein peaked on day 28 at 51 μg/mL (95% CI 41·1–63·3) in the high-dose group, 44·9 μg/mL (25·8–56·3) in the low-dose group, and 5·2 μg/mL (3·5–7·6) in the placebo group, with respective response rates of 96% (95% CI 85·7–99·5), 96% (86·5–99·5), and 5% (0·1–24·9). Geometric mean concentrations decreased by day 180 to 25·5 μg/mL (95% CI 20·6–31·5) in the high-dose group, 22·1 μg/mL (19·3–28·6) in the low-dose group, and 3·2 μg/mL (2·4–4·9) in the placebo group. 28 (57%) participants given high-dose vaccine and 31 (61%) participants

given low-dose vaccine developed glycoprotein-specific CD4 cell responses, and 33 (67%) and 35 (69%), respectively, developed CD8 responses.
Interpretation
ChAd3-EBO-Z was safe and well tolerated, although mild to moderate systemic adverse events were common. A single dose was immunogenic in almost all vaccine recipients. Antibody responses were still significantly present at 6 months. There was no significant difference between doses for safety and immunogenicity outcomes. This acceptable safety profile provides a reliable basis to proceed with phase 2 and phase 3 efficacy trials in Africa.
Funding
Swiss State Secretariat for Education, Research and Innovation (SERI), through the EU Horizon 2020 Research and Innovation Programme.

Immunogenicity and safety of a novel monovalent high-dose inactivated poliovirus type 2 vaccine in infants: a comparative, observer-blind, randomised, controlled trial
Xavier Sáez-Llorens, Ralf Clemens, Geert Leroux-Roels, José Jimeno, Sue Ann Costa Clemens, William C Weldon, M Steven Oberste, Natanael Molina, Ananda S Bandyopadhyay
Summary
Background
Following the proposed worldwide switch from trivalent oral poliovirus vaccine (tOPV) to bivalent types 1 and 3 OPV (bOPV) in 2016, inactivated poliovirus vaccine (IPV) will be the only source of protection against poliovirus type 2. With most countries opting for one dose of IPV in routine immunisation schedules during this transition because of cost and manufacturing constraints, optimisation of protection against all poliovirus types will be a priority of the global eradication programme. We assessed the immunogenicity and safety of a novel monovalent high-dose inactivated poliovirus type 2 vaccine (mIPV2HD) in infants.
Methods
This observer-blind, comparative, randomised controlled trial was done in a single centre in Panama. We enrolled healthy infants who had not received any previous vaccination against poliovirus. Infants were randomly assigned (1:1) by computer-generated randomisation sequence to receive a single dose of either mIPV2HD or standard trivalent IPV given concurrently with a third dose of bOPV at 14 weeks of age. At 18 weeks, all infants were challenged with one dose of monovalent type 2 OPV (mOPV2). Primary endpoints were seroconversion and median antibody titres to type 2 poliovirus 4 weeks after vaccination with mIPV2HD or IPV; and safety (as determined by the proportion and nature of serious adverse events and important medical events for 8 weeks after vaccination). The primary immunogenicity analyses included all participants for whom a post-vaccination blood sample was available. All randomised participants were included in the safety analyses. This trial is registered with ClinicalTrials.gov, number NCT02111135.
Findings
Between April 14 and May 9, 2014, 233 children were enrolled and randomly assigned to receive mIPV2HD (117 infants) or IPV (116 infants). 4 weeks after vaccination with mIPV2HD or IPV, seroconversion to poliovirus type 2 was recorded in 107 (93·0%, 95% CI 86·8–96·9) of 115 infants in the mIPV2HD group compared with 86 (74·8%, 65·8–82·4) of 115 infants in the IPV group (difference between groups 18·3%, 95% CI 5·0–31·1; p<0·0001), and median antibody titres against poliovirus type 2 were 181 (95% CI 72·0–362·0) in the mIPV2HD group and 36 (18·0–113·8) in the IPV group (difference between groups 98·8, 95% CI 60·7–136·9; p<0·0001). Serious adverse events were reported for six (5%) of 117 infants in the mIPV2HD

group and seven (6%) of 116 infants in the IPV group during the 8-week period after vaccination; none were related to vaccination. No important medical events were reported.
Interpretation
Our findings lend support to the use of mIPV2HD as an option for stockpiling for outbreak response or primary protection in selected areas at risk for emergence of poliovirus type 2 during the next phase of the polio eradication plan.
Funding
Bill & Melinda Gates Foundation.

Lancet Global Health
Mar 2016 Volume 4 Number 3 e137-e214
http://www.thelancet.com/journals/langlo/issue/current
Articles
Effect of Haemophilus influenzae type b vaccination without a booster dose on invasive H influenzae type b disease, nasopharyngeal carriage, and population immunity in Kilifi, Kenya: a 15-year regional surveillance study
Laura L Hammitt, Rosie J Crane, Angela Karani, Alex Mutuku, Susan C Morpeth, Polly Burbidge, David Goldblatt, Tatu Kamau, Shahnaaz Sharif, Neema Mturi, J Anthony G Scott
Summary
Background
Haemophilus influenzae type b (Hib) conjugate vaccine, delivered as a three-dose series without a booster, was introduced into the childhood vaccination programme in Kenya in 2001. The duration of protection and need for a booster dose are unknown. We aimed to assess vaccine effectiveness, the impact of the vaccine on nasopharyngeal carriage, and population immunity after introduction of conjugate Hib vaccine in infancy without a booster dose in Kenya.
Methods
This study took place in the Kilifi Health and Demographic Surveillance System (KHDSS), an area of Kenya that has been monitored for vital events and migration every 4 months since 2000. We analysed sterile site cultures for H influenzae type b from children (aged ≤12 years) admitted to the Kilifi County Hospital (KCH) from Jan 1, 2000, through to Dec 31, 2014. We determined the prevalence of nasopharyngeal carriage by undertaking cross-sectional surveys in random samples of KHDSS residents (of all ages) once every year from 2009 to 2012, and measured Hib antibody concentrations in five cross-sectional samples of children (aged ≤12 years) within the KHDSS (in 1998, 2000, 2004–05, 2007, and 2009). We calculated incidence rate ratios between the prevaccine era (2000–01) and the routine-use era (2004–14) and defined vaccine effectiveness as 1 minus the incidence rate ratio, expressed as a percentage.
Findings
40 482 children younger than 13 years resident in KHDSS were admitted to KCH between 2000 and 2014, 38 206 (94%) of whom had their blood cultured. The incidence of invasive H influenzae type b disease in children younger than 5 years declined from 62·6 (95% CI 46·0–83·3) per 100 000 in 2000–01 to 4·5 (2·5–7·5) per 100 000 in 2004–14, giving a vaccine effectiveness of 93% (95% CI 87–96). In the final 5 years of observation (2010–14), only one case of invasive H influenzae type b disease was detected in a child younger than 5 years. Nasopharyngeal H influenzae type b carriage was detected in one (0·2%) of 623 children younger than 5 years between 2009 and 2012. In the 2009 serosurvey, 92 (79%; 95% CI 70–86) of 117 children aged 4–35 months had long-term protective antibody concentrations.

Interpretation
In this region of Kenya, use of a three-dose primary series of Hib vaccine without a booster dose has resulted in a significant and sustained reduction in invasive H influenzae type b disease. The prevalence of nasopharyngeal carriage is low and the profile of Hib antibodies suggests that protection wanes only after the age at greatest risk of disease. Although continued surveillance is important to determine whether effective control persists, these findings suggest that a booster dose is not currently required in Kenya.
Funding
Gavi, the Vaccine Alliance, Wellcome Trust, European Society for Paediatric Infectious Diseases, and National Institute for Health Research.

Maternal and Child Health Journal
Volume 20, Issue 3, March 2016
http://link.springer.com/journal/10995/20/3/page/1
[New issue; No relevant content identified]

Medical Decision Making (MDM)
April 2016; 36 (3)
http://mdm.sagepub.com/content/current
[New issue; No relevant content identified]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
December 2015 Volume 93, Issue 4 Pages 651–883
http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2015.93.issue-4/issuetoc
[Reviewed earlier]

Nature
Volume 531 Number 7592 pp7-134 3 March 2016
http://www.nature.com/nature/current_issue.html
[New issue; No relevant content identified]

Nature Medicine
March 2016, Volume 22 No 3 pp219-323
http://www.nature.com/nm/journal/v22/n3/index.html
Nature Medicine | Editorial
A modest proposal [Zika]
doi:10.1038/nm.4065
Published online
03 March 2016
Abstract
Amid heightened concerns about the Zika virus outbreak in parts of the Western Hemisphere, it is worth remembering that the most extreme countermeasures are not necessarily the only

ones worth trying. We must engage in calculated and diverse responses that will ensure sustainable outcomes for this and other outbreaks.

Nature Reviews Immunology
March 2016 Vol 16 No 3
http://www.nature.com/nri/journal/v16/n3/index.html
[New issue; No relevant content identified]

New England Journal of Medicine
March 3, 2016 Vol. 374 No. 9
http://www.nejm.org/toc/nejm/medical-journal
[New issue; No relevant content identified]

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

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

PharmacoEconomics
Volume 34, Issue 2, February 2016
http://link.springer.com/journal/40273/34/2/page/1
Big Data Themed Issue
[Reviewed earlier]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 5 March 2016]
[No new content]

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
(Accessed 5 March 2016)
Research Article
Knowledge, Attitude and Perception of Ebola Virus Disease among Secondary School Students in Ondo State, Nigeria, October, 2014
March 4, 2016 ·

Introduction: The first case of Ebola Virus Disease (EVD) in Nigeria was imported on 20th July 2014, by an air traveller. On 8th August, 2014, WHO declared the Ebola outbreak in West Africa a Public Health Emergency of International Concern (PHEIC). This study aimed at assessing the knowledge, perception and attitude of secondary school students towards EVD and adopting disease preventive behaviour.
Methods: A descriptive cross sectional study of 440 students from a mixed secondary school in Owo, Ondo State was done. Data was collected in October 2014 when Nigeria was yet to be declared EVD free. Simple random sampling was used to select the school while Systematic random sampling was used in the selection of participants. A semi-structured, interviewer administered questionnaire was used to collect data. Data was analyzed with SPSS version 21. Descriptive statistics and Chi-square test were done, level of statistical significant was 5%.
Results: Mean age of respondents was 13.7±1.9 years. Females were 48.2%. Most of the respondents had heard of Ebola Virus Disease (95.4%). Female respondents (51.3%), those who were 15 years and above (51.1%) and in the senior class (54.1%), and had good general knowledge of EVD and across all domains. Being in the senior secondary class and seeking for health care in the hospital were positively associated with good general knowledge (p-value: 0.029, and <0.001 respectively). Three commonest modes of spread of EVD mentioned were contact between infected animals and men (74.8%), touching body fluids of a person who is sick of EVD (57.0%), and contact (55.2%). The top three signs of EVD mentioned were abnormal bleeding from any part of the body (56.10%), vomiting (47.0%) and fever (42.3%).
Conclusion: Our results revealed suboptimal EVD-related knowledge, attitude and practice among the students. Promotion of health messages and training of students on prevention of EVD to effectively control past and future outbreaks of EVD in Nigeria was immediately initiated in schools in Ondo State.

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 5 March 2016)
Transformative Innovations in Reproductive, Maternal, Newborn, and Child Health over the Next 20 Years
Cyril M. Engmann, Sadaf Khan, Cheryl A. Moyer, Patricia S. Coffey, Zulfiqar A. Bhutta
Collection Review | published 02 Mar 2016 | PLOS Medicine
10.1371/journal.pmed.1001969
Summary Points
:: Accelerating progress in reproductive, maternal, newborn, and child health (RMNCH) over the past 30 years has resulted in significant decreases in mortality, as well as shifts in causes of death. For example, deaths from diarrhea among children under age 5 have significantly declined. This increased survival means an increasing fraction of under-5 deaths occur in the first 4 weeks of life, the neonatal period.
:: Transformative changes, including advances such as the development of immunizations, wide uptake of contraception, and the availability of medications such as oxytocin, have contributed to an improved morbidity and mortality curve. Such advances are set against a broader backdrop of increasing national wealth, stronger health systems, aligned political agendas, and advocacy systems.
:: Global mechanisms and strategies such as the Global Strategy for Women's, Children's, and Adolescents' Health, Global Alliance for the Vaccine Initiative (GAVI), the United Nations Commission on Life-Saving Commodities for Women and Children, Family Planning 2020, and

the Every Newborn Action Plan, among others, are serving to drive the global agenda forward, although stubborn gaps remain.
:: In this paper, we discuss promising innovations that in our opinion have significant promise in moving the RMNCH agenda forward. While some of these are technologies, others are efforts aimed at improving commodities, increasing demand for services, and promoting equity in access.

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 5 March 2016)

Zika Virus: Medical Countermeasure Development Challenges
Robert W. Malone, Jane Homan, Michael V. Callahan, Jill Glasspool-Malone, Lambodhar Damodaran, Adriano De Bernardi Schneider, Rebecca Zimler, James Talton, Ronald R. Cobb, Ivan Ruzic, Julie Smith-Gagen, Daniel Janies, James Wilson, Zika Response Working Group
Review | published 02 Mar 2016 | PLOS Neglected Tropical Diseases
10.1371/journal.pntd.0004530
Abstract
Introduction
Reports of high rates of primary microcephaly and Guillain–Barré syndrome associated with Zika virus infection in French Polynesia and Brazil have raised concerns that the virus circulating in these regions is a rapidly developing neuropathic, teratogenic, emerging infectious public health threat. There are no licensed medical countermeasures (vaccines, therapies or preventive drugs) available for Zika virus infection and disease. The Pan American Health Organization (PAHO) predicts that Zika virus will continue to spread and eventually reach all countries and territories in the Americas with endemic Aedes mosquitoes. This paper reviews the status of the Zika virus outbreak, including medical countermeasure options, with a focus on how the epidemiology, insect vectors, neuropathology, virology and immunology inform options and strategies available for medical countermeasure development and deployment.
Methods
Multiple information sources were employed to support the review. These included publically available literature, patents, official communications, English and Lusophone lay press. Online surveys were distributed to physicians in the US, Mexico and Argentina and responses analyzed. Computational epitope analysis as well as infectious disease outbreak modeling and forecasting were implemented. Field observations in Brazil were compiled and interviews conducted with public health officials.

Eliminating the Neglected Tropical Diseases: Translational Science and New Technologies
Peter J. Hotez, Bernard Pecoul, Suman Rijal, Catharina Boehme, Serap Aksoy, Mwelecele Malecela, Roberto Tapia-Conyer, John C. Reeder
Review | published 02 Mar 2016 | PLOS Neglected Tropical Diseases
10.1371/journal.pntd.0003895
Abstract
Today, the World Health Organization recognizes 17 major parasitic and related infections as the neglected tropical diseases (NTDs). Despite recent gains in the understanding of the nature and prevalence of NTDs, as well as successes in recent scaled-up preventive chemotherapy strategies and other health interventions, the NTDs continue to rank among the world's greatest

global health problems. For virtually all of the NTDs (including those slated for elimination under the auspices of a 2012 London Declaration for NTDs and a 2013 World Health Assembly resolution [WHA 66.12]), additional control mechanisms and tools are needed, including new NTD drugs, vaccines, diagnostics, and vector control agents and strategies. Elimination will not be possible without these new tools. Here we summarize some of the key challenges in translational science to develop and introduce these new technologies in order to ensure success in global NTD elimination efforts.

PLoS One
http://www.plosone.org/
[Accessed 5 March 2016]

The Success of a Universal Hepatitis B Immunization Program as Part of Thailand's EPI after 22 Years' Implementation
Nawarat Posuwan, Nasamon Wanlapakorn, Pattaratida Sa-nguanmoo, Rujipat Wasitthankasem, Preeyaporn Vichaiwattana, Sirapa Klinfueng, Viboonsak Vuthitanachot, Siriporn Sae-lao, Monthana Foonoi, Apinya Fakthongyoo, Jamorn Makaroon, Klaita Srisingh, Duangporn Asawarachun, Somchai Owatanapanich, Norra Wutthiratkowit, Kraisorn Tohtubtiang, Pornsak Yoocharoen, Sompong Vongpunsawad, Yong Poovorawan
Research Article | published 03 Mar 2016 | PLOS ONE
10.1371/journal.pone.0150499

Immunization Coverage Surveys and Linked Biomarker Serosurveys in Three Regions in Ethiopia
Mark A. Travassos, Berhane Beyene, Zenaw Adam, James D. Campbell, Nigisti Mulholland, Seydou S. Diarra, Tassew Kassa, Lisa Oot, Jenny Sequeira, Mardi Reymann, William C. Blackwelder, Yukun Wu, Inna Ruslanova, Jaya Goswami, Samba O. Sow, Marcela F. Pasetti, Robert Steinglass, Amha Kebede, Myron M. Levine
Research Article | published 02 Mar 2016 | PLOS ONE
10.1371/journal.pone.0149970

Abstract
Objective
Demographic and health surveys, immunization coverage surveys and administrative data often divergently estimate vaccination coverage, which hinders pinpointing districts where immunization services require strengthening. We assayed vaccination coverage in three regions in Ethiopia by coverage surveys and linked serosurveys.
Methods
Households with children aged 12–23 (N = 300) or 6–8 months (N = 100) in each of three districts (woredas) were randomly selected for immunization coverage surveys (inspection of vaccination cards and immunization clinic records and maternal recall) and linked serosurveys. IgG-ELISA serologic biomarkers included tetanus antitoxin ≥ 0.15 IU/ml in toddlers (receipt of tetanus toxoid) and Haemophilus influenzae type b (Hib) anti-capsular titers ≥ 1.0 mcg/ml in infants (timely receipt of Hib vaccine).
Findings
Coverage surveys enrolled 1,181 children across three woredas; 1,023 (87%) also enrolled in linked serosurveys. Administrative data over-estimated coverage compared to surveys, while maternal recall was unreliable. Serologic biomarkers documented a hierarchy among the

districts. Biomarker measurement in infants provided insight on timeliness of vaccination not deducible from toddler results.
Conclusion
Neither administrative projections, vaccination card or EPI register inspections, nor parental recall, substitute for objective serological biomarker measurement. Including infants in serosurveys informs on vaccination timeliness.

PLoS Pathogens
http://journals.plos.org/plospathogens/
(Accessed 5 March 2016)
[No new relevant content]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
(Accessed 5 March 2016)
[No new relevant content]

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

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

Preventive Medicine
Volume 83, Pages 1-76 (February 2016)
http://www.sciencedirect.com/science/journal/00917435/84
Regular Articles
Predictors of influenza vaccine uptake during the 2009/10 influenza A H1N1v ('swine flu') pandemic: Results from five national surveys in the United Kingdom
Original Research Article
Pages 57-61
You Kyung Julia Han, Susan Michie, Henry W.W. Potts, G. James Rubin

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

Public Health Ethics
Volume 9 Issue 1 April 2016
http://phe.oxfordjournals.org/content/current
Original Articles

An Ethical Justification for Expanding the Notion of Effectiveness in Vaccine Post-Market Monitoring: Insights from the HPV Vaccine in Canada

Ana Komparic, Maxwell J. Smith, and Alison Thompson
Public Health Ethics (2016) 9 (1): 78-91 doi:10.1093/phe/phu049
Abstract
Health regulators must carefully monitor the real-world safety and effectiveness of marketed vaccines through post-market monitoring in order to protect the public's health and promote those vaccines that best achieve public health goals. Yet, despite the fact that vaccines used in collective immunization programmes should be assessed in the context of a public health response, post-market effectiveness monitoring is often limited to assessing immunogenicity or limited programmatic features, rather than assessing effectiveness across populations. We argue that post-market monitoring ought to be expanded in two ways to reflect a 'public health notion of post-market effectiveness', which incorporates normative public health considerations: (i) effectiveness monitoring should yield higher quality data and grant special attention to underrepresented and vulnerable populations; and (ii) the scope of effectiveness should be expanded to include a consideration of the various social factors that maximize (and minimize) a vaccine's effectiveness at the population level, paying particular attention to how immunization programmes impact related health gradients. We use the case of the human papillomavirus vaccine in Canada to elucidate how expanding post-market effectiveness monitoring is necessary to close the gap between clinical practice and public health, and to ensure that vaccines are effective in a morally relevant sense.

Ethical Criteria for Human Challenge Studies in Infectious Diseases

Ben Bambery, Michael Selgelid, Charles Weijer, Julian Savulescu, and Andrew J. Pollard
Public Health Ethics (2016) 9 (1): 92-103 doi:10.1093/phe/phv026
Abstract
Purposeful infection of healthy volunteers with a microbial pathogen seems at odds with acceptable ethical standards, but is an important contemporary research avenue used to study infectious diseases and their treatments. Generally termed 'controlled human infection studies', this research is particularly useful for fast tracking the development of candidate vaccines and may provide unique insight into disease pathogenesis otherwise unavailable. However, scarce bioethical literature is currently available to assist researchers and research ethics committees in negotiating the distinct issues raised by research involving purposefully infecting healthy volunteers. In this article, we present two separate challenge studies and highlight the ethical issues of human challenge studies as seen through a well-constructed framework. Beyond the same stringent ethical standards seen in other areas of medical research, we conclude that human challenge studies should also include: (i) independent expert reviews, including systematic reviews; (ii) a publicly available rationale for the research; (iii) implementation of measures to protect the public from spread of infection beyond the research setting; and (iv) a new system for compensation for harm. We hope these additions may encourage safer and more ethical research practice and help to safeguard public confidence in this vital research alternative in years to come.

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

Qualitative Health Research
March 2016; 26 (4)
http://qhr.sagepub.com/content/current
Special Issue: Autoethnography
Commentary
Autoethnography in Health Research: Growing Pains?
Heewon Chang
1Eastern University, St. Davids, Pennsylvania, USA
Abstract
Autoethnography is gaining acceptance as a legitimate research method in health science research. The growing volume of published autoethnographies is indicative of this trend. After discussing the methodological tenents of this qualitative research method and its compatibility with health-related research, the author illustrates this trend with examples of published autoethnogrpahic books, theses, and journal articles. While celebrating the potential of autoethnography as a suitable health research method, the author critiques dominatly descriptive and evocative illness self-narratives that may evoke emontionally compelling responses from readers but offer insufficient sociocultural insights about the illness phenomenon. To identify a "desirable" autoethnography that provides not only a "thick description" of personal experiences but also a sociocultural interpretation of such experiences, the author recommends both creators and consumers of autoethnography to ask five evaluative questions: (1) Does the autoethnography use authentic and trustworthy data?; (2) Does the autoethnography follow a reliable research process and show the process clearly?; (3) Does the autoethnography follow ethical steps to protect the rights of self and others presented and implicated in the autoethnography?; (4) Does the autoethnography analyze and interpret the sociocultural meaning of the author's personal experiences?; and (5) Does the autoethnography attempt to make a scholarly contribution with its conclusion and engagement of the existing literature?

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 5 March 2016]
[No new relevant content]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
December 2015 Vol. 38, No. 6
http://www.paho.org/journal/
[Reviewed earlier]

Risk Analysis
February 2016 Volume 36, Issue 2 Pages 183–430
http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-2/issuetoc
[Reviewed earlier]

Science
04 March 2016 Vol 351, Issue 6277
http://www.sciencemag.org/current.dtl
Policy Forum
Liberating field science samples and data
By Marcia McNutt, Kerstin Lehnert, Brooks Hanson, Brian A. Nosek, Aaron M. Ellison, John Leslie King
Science04 Mar 2016 : 1024-1026
Summary
Transparency and reproducibility enhance the integrity of research results for scientific and public uses and empower novel research applications. Access to data, samples, methods, and reagents used to conduct research and analysis, as well as to the code used to analyze and process data and samples, is a fundamental requirement for transparency and reproducibility. The field sciences (e.g., geology, ecology, and archaeology), where each study is temporally (and often spatially) unique, provide exemplars for the importance of preserving data and samples for further analysis. Yet field sciences, if they even address such access, commonly do so by simply noting "data and samples available upon request." They lag behind some laboratory sciences in making data and samples available to the broader research community. It is time for this to change. We discuss cultural, financial, and technical barriers to change and ways in which funders, publishers, scientific societies, and others are responding.

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

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

Vaccine
Volume 34, Issue 12, Pages 1423-1488 (14 March 2016)
http://www.sciencedirect.com/science/journal/0264410X/34/12
WHO Report
Pertussis vaccines: WHO position paper, August 2015—Recommendations
Pages 1423-1425

WHO

Abstract

This article presents the World Health Organization's (WHO) recommendations for the use of vaccines against Bordetella pertussis from the WHO position paper on Pertussis vaccines: WHO position paper—August 2015, recently published in the Weekly Epidemiological Record (Pertussis vaccines: WHO position paper. Wkly Epidemiol Rec 2015;90(August(35)):433–60). This position paper summarizes the most recent developments in the field of pertussis disease and its prevention by vaccination. It includes the WHO position on the choice of Pertussis vaccine as well as on the use of additional strategies, particularly vaccination during pregnancy, for prevention of early infant mortality. This document replaces the first WHO position paper on vaccines against disease caused by Pertussis published in 2010 (Pertussis vaccines: WHO position paper. Wkly Epidemiol Rec 2010;85(October(40)):385–400) and incorporates the revised guidance on the choice of pertussis vaccines published in July 2014 (Pertussis vaccines: WHO position paper. Wkly Epidemiol Rec 2014;89(July(30)):337–44).

Footnotes to this paper provide a number of core references. In accordance with its mandate to provide guidance to Member States on health policy matters, WHO issues a series of regularly updated position papers on vaccines and combinations of vaccines against diseases that have an international public health impact. These papers are concerned primarily with the use of vaccines in large-scale immunization programmes; they summarize essential background information on diseases and vaccines, and conclude with WHO's current position on the use of vaccines in the global context. This paper reflects the recommendations of WHO's Strategic Advisory Group of Experts (SAGE) on immunization. These recommendations were discussed by SAGE at its April 2014 and April 2015 meetings. The evidence presented at the meetings can be accessed at http://www.who.int/immunization/sage/previous/en/index.html.

Brief report

Hong Kong Chinese parental attitudes towards vaccination and associated socio-demographic disparities

Pages 1426-1429

Linda Dong-Ling Wang, Wendy Wing Tak Lam, Richard Fielding

Abstract

Background

Most previous studies on parental attitudes towards vaccination focused on a disease-specific vaccine. In this study we describe general attitudes towards vaccination in Chinese parents and associated socio-demographic disparities.

Methods

Data were collected from a random sample of 1996 Hong Kong Chinese parents by telephone interviews (response rate 60%). Multiple linear regression analysis was performed.

Results

Most parents believed vaccination to be effective (91.6%) and beneficial (78.7%), though many considered optional vaccines unimportant (39.5%) and unnecessary (62.1%). Demographic characteristics associated with parental negative attitudes to vaccination included being female, born in Hong Kong, married, having fewer children, and children ever experienced vaccination side effects. Lower personal income and religious affiliation were associated with more hesitant attitudes towards optional vaccines.

Conclusion

Segments of the population hold significantly negative attitudes towards vaccination and optional vaccines, suggesting a need for targeted efforts on vaccination communication in these groups.

Regular papers

Primary and booster vaccination with an inactivated poliovirus vaccine (IPV) is immunogenic and well-tolerated in infants and toddlers in China

Original Research Article
Pages 1436-1443
Rongcheng Li, Chang Gui Li, Yanping Li, Youping Liu, Hong Zhao, Xiaoling Chen, Sherine Kuriyakose, Olivier Van Der Meeren, Karin Hardt, Marjan Hezareh, Sumita Roy-Ghanta

Abstract

Introduction

Replacing live-attenuated oral poliovirus vaccines (OPV) with inactivated poliovirus vaccines (IPV) is part of the global strategy to eradicate poliomyelitis. China was declared polio-free in 2000 but continues to record cases of vaccine-associated-poliomyelitis and vaccine-derived-poliovirus outbreaks. Two pilot safety studies and two larger immunogenicity trials evaluated the non-inferiority of IPV (Poliorix™, GSK Vaccines, Belgium) versus OPV in infants and booster vaccination in toddlers primed with either IPV or OPV in China.

Methods

In pilot safety studies, 25 infants received 3-dose IPV primary vaccination (Study A, www.clinicaltrial.gov NCT00937404) and 25 received an IPV booster after priming with three OPV doses (Study B, NCT01021293). In the randomised, controlled immunogenicity and safety trial (Study C, NCT00920439), infants received 3-dose primary vaccination with IPV (N = 541) or OPV (N = 535) at 2,3,4 months of age, and a booster IPV dose at 18-24 months (N = 470, Study D, NCT01323647: extension of study C). Blood samples were collected before and one month post-dose-3 and booster. Reactogenicity was assessed using diary cards. Serious adverse events (SAEs) were captured throughout each study.

Results

Study A and B showed that IPV priming and IPV boosting (after OPV) was safe. Study C: One month post-dose-3, all IPV and ≥98.3% OPV recipients had seroprotective antibody titres towards each poliovirus type. The immune response elicited by IPV was non-inferior to Chinese OPV. Seroprotective antibody titres persisted in ≥94.7% IPV and ≥96.1% OPV recipients at 18–24 months (Study D). IPV had a clinically acceptable safety profile in all studies. Grade 3 local and systemic reactions were uncommon. No SAEs were related to IPV administration.

Conclusion

Trivalent IPV is non-inferior to OPV in terms of seroprotection (in the Chinese vaccination schedule) in infant and toddlers, with a clinically acceptable safety profile

Supplemental measles vaccine antibody response among HIV-infected and -uninfected children in Malawi after 1- and 2-dose primary measles vaccination schedules

Original Research Article
Pages 1459-1464
Ashley L. Fowlkes, Desiree Witte, Judy Beeler, Susette A. Audet, Robin Broadhead, William J. Bellini, Felicity Cutts, Rita F. Helfand

Abstract

Background

The long-term antibody response to measles vaccine (MV) administered at age 6 months with or without subsequent doses is not well documented.
Methods
Measles serum antibody responses were evaluated after a supplemental dose of measles vaccine (sMV) administered at a median age of 20 months among Malawian children who had previously received 2 doses of measles vaccine (MV) at ages 6 and 9 months (HIV-infected and random sample of HIV-uninfected) or 1 dose at age 9 months (random sample of HIV-uninfected). We compared measles antibody seropositivity between groups by enzyme linked immunoassay and seroprotection by plaque reduction neutralization geometric mean concentrations.
Results
Of 1756 children enrolled, 887 (50.5%) received a sMV dose following MV at 9 months of age and had specimens available after sMV receipt, including 401 HIV-uninfected children who received one MV dose at 9 months, 464 HIV-uninfected and 22 HIV-infected children who received two doses of MV at ages 6 and 9 months. Among HIV-uninfected children, protective levels of antibody were found post sMV in 90–99% through ages 24–36 months and were not affected by MV schedule. Geometric mean concentration levels of measles antibody were significantly increased post-sMV among those HIV-uninfected children previously non-responsive to vaccination. Among HIV-infected children, the proportion seroprotected increased initially but by 9 months post-sMV was no higher than pre-sMV.
Conclusions
Our findings support early 2-dose MV to provide measles immunity for young infants without risk of interference with antibody responses to subsequent MV doses administered as part of SIAs.

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 5 March 2016)
[No new relevant content]

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

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

Drug Delivery and Translational Research
First online: 29 February 2016
Research Article
Long-term stability of influenza vaccine in a dissolving microneedle patch

Matthew J. Mistilis, Jessica C. Joyce, E. Stein Esser, Ioanna Skountzou, Richard W. Compans, Andreas S. Bommarius, Mark R. Prausnitz

Abstract

This study tested the hypothesis that optimized microneedle patch formulations can stabilize trivalent subunit influenza vaccine during long-term storage outside the cold chain and when exposed to potential stresses found during manufacturing and storage. Formulations containing combinations of trehalose/sucrose, sucrose/arginine, and arginine/heptagluconate were successful at retaining most or all vaccine activity during storage at 25 °C for up to 24 months as determined by ELISA assay. The best formulation of microneedle patches contained arginine/heptagluconate, which showed no significant loss of vaccine activity during the study. To validate these in vitro findings, mice were immunized using trivalent influenza vaccine stored in microneedle patches for more than 1 year at 25 °C, which elicited antibody titers greater than or equal to fresh liquid vaccine delivered by intradermal injection, indicating the retention of immunogenicity during storage. Finally, influenza vaccine in microneedle patches lost no significant activity during exposure to 60 °C for 4 months, multiple freeze-thaw cycles, or electron beam irradiation. We conclude that optimally formulated microneedle patches can retain influenza vaccine activity during extended storage outside the cold chain and during other environmental stresses, which suggests the possibility of microneedle patch storage on pharmacy shelves without refrigeration.

Current Opinion in Infectious Diseases

2016 Published Ahead-of-Print

Group B Streptococcus: developing a correlate of protection for a vaccine against neonatal infections.

Dangor, Ziyaad; Lala, Sanjay G.; Kwatra, Gaurav; Madhi, Shabir A.

Abstract

Purpose of review:

Maternal vaccination to prevent invasive Group B Streptococcus (GBS) disease in infants is an important alternative strategy to intrapartum antibiotic prophylaxis. Licensure of GBS vaccines could be expedited using immunological correlates of protection.

Recent findings:

Between 2014 and 2015, we identified two studies that demonstrated an inverse association between invasive GBS disease and maternal serotype III capsular antibody levels greater than 1 [mu]g/ml and greater than 3 [mu]g/ml, and higher maternal antibody levels were associated with protection against serotype Ia disease. Furthermore, serotype Ia and III antibody levels greater than 3 [mu]g/ml were associated with a reduced risk of GBS colonization in pregnant women.

Experimental studies have investigated the use of GBS surface proteins as vaccine candidates. Although the immunogenic potential of pilus island and other surface proteins has been shown in animal-model studies, no association between maternal pilus island antibody levels and invasive GBS disease was demonstrated in infants. Additionally, several novel innate immune mediators that prevent GBS infection have been described in human and experimental studies.

Summary:

Recent studies suggest that maternal capsular antibody thresholds may be used as immunological correlates of protection for vaccine licensure. Surface proteins, as candidate vaccines or conjugates to the polysaccharide-protein vaccine, may broaden protection against invasive GBS disease.

Oxford Review of Economic Policy
Spring 2016
Reorienting health aid to meet post-2015 global health challenges: a case study of Sweden as a donor
Gavin Yamey, Jesper Sundewall, Helen Saxenian, Robert Hecht, Keely Jordan, Marco Schäferhoff, Christina Schrade, Cécile Deleye, Milan Thomas, Nathan Blanchet, Lawrence Summers, and Dean Jamison
Abstract
The international development community is transitioning from the era of the Millennium Development Goals (MDGs), ending in 2015, to the era of the Sustainable Development Goals (SDGs), which have a 2030 target. Global development assistance for health (DAH) increased substantially in the MDGs era, from US $10.8 billion in 2001 to $28.1 billion by 2012 (in 2010 US dollars), and it played a crucial role in tackling global challenges such as HIV/AIDS and malaria. In this paper, we describe the likely health challenges of the SDGs era and the types of international assistance that will be required to help tackle these challenges. We propose a new way of classifying DAH based on considering the functions that it will need to serve in order to address these post-2015 challenges. We apply this new classification to the current health aid spending of one donor, Sweden, as a case study. Based on our findings, we suggest ways in which Sweden's DAH could be reoriented towards meeting the health challenges of the next two decades.

PLoS Biology
Published: March 2, 2016
DOI: 10.1371/journal.pbio.1002376
Honing the Priorities and Making the Investment Case for Global Health
Trevor Mundel
Abstract
In the aftermath of the Ebola crisis, the global health community has a unique opportunity to reflect on the lessons learned and apply them to prepare the world for the next crisis. Part of that preparation will entail knowing, with greater precision, what the scale and scope of our specific global health challenges are and what resources are needed to address them. However, how can we know the magnitude of the challenge, and what resources are needed without knowing the current status of the world through accurate primary data? Once we know the current status, how can we decide on an intervention today with a predicted impact decades out if we cannot project into that future? Making a case for more investments will require not just better data generation and sharing but a whole new level of sophistication in our analytical capability—a fundamental shift in our thinking to set expectations to match the reality. In this current status of a distributed world, being transparent with our assumptions and specific with the case for investing in global health is a powerful approach to finding solutions to the problems that have plagued us for centuries.

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Media/Policy Watch

Navigation: A. Ebola/EVD; Polio; MERS-Cov B. WHO; CDC C. Announcements/Milestones/Perspectives
D. Reports/Research/Analysis E. Journal Watch F. Media Watch

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

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

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 5 March 2016
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 5 March 2016
[No new, unique, relevant content]

The Economist
http://www.economist.com/
Accessed 5 March 2016
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
Accessed 5 March 2016
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 5 March 2016
Want To Change Someone's Mind About Vaccines? Here's A Start
It's daunting to start a conversation about vaccines with someone you care about when they don't vaccinate. A new toolkit offers a guide.
Tara Haelle, Contributor Mar 01, 2016

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 5 March 2016
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 5 March 2016

[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 5 March 2016
[No new, unique, relevant content]

Mail & Guardian
http://mg.co.za/
Accessed 5 March 2016
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 5 March 2016
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 5 March 2016
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 5 March 2016
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 5 March 2016
[No new, unique, relevant content]

Think Tanks et al

Brookings
http://www.brookings.edu/
Accessed 5 March 2016
[No new relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 5 March 2016
[No new relevant content]

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

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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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