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

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

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

Comments and suggestions should be directed to
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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 (EST/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]*

WHO: Global immunization coverage sustained in past 5 years
Geneva, 15 July 2016
The latest WHO and UNICEF data on global immunization coverage show that 86% of the world's children received the required 3 doses of diphtheria-tetanus-pertussis containing vaccines (DTP3) in 2015, a coverage level that has been sustained above 85% since 2010.

As a result, the number of children who did not receive routine vaccinations has dropped to an estimated 19.4 million, down from 33.8 million in 2000.1

However, this progress falls short of global immunization targets of the Global Vaccine Action Plan (GVAP) for the Decade of Vaccines of achieving 90% or more DTP3 vaccination coverage at the national level and 80% or more in all districts2 in all countries by 2015.

Gaps in immunization coverage

Among the 194 WHO Member States, 126 countries achieved and sustained the 90% immunization target for DTP3, up from 63 in 2000. Many of these countries, especially the low and middle income countries, need to continue strengthening their health systems as they add vaccines to their national programmes so that coverage with all vaccines reach and sustain at the 90% or more target.

Countries such as Congo, Guatemala, Iraq, Mauritania, Philippines and South Sudan have experienced recent decline in coverage due to under-investments in national immunization programmes, vaccine stock-outs, disease outbreaks or conflicts and have not been able to establish or maintain strong health systems that are needed to sustainably deliver vaccination services to reach and sustain high immunization coverage.

Six countries had less than 50% coverage with DTP3 in 2015, many of which are fragile states and affected by emergencies: Central African Republic, Equatorial Guinea, Somalia, South Sudan, Syrian Arab Republic and Ukraine.

Inequities in immunization coverage

In addition to generating estimates of national immunization coverage, WHO and UNICEF also collect and report data on coverage at subnational levels. National coverage estimates often mask large inequities in coverage within countries. Achieving high and equitable coverage requires targeted actions at subnational levels.

There were 158 countries that reported coverage estimates at the district level for 2015. While WHO and UNICEF estimates showed that 126 countries had DTP3 coverage of 90% or more at the national level, only 90 countries reported subnational coverage. Of these, only 53 countries had coverage of 80% or more in all districts. Worldwide, of the 32201 districts from which data were available, 25% had coverage below 80%; the proportion could be higher given the nature and quality of the administrative coverage data at the district level.

WHO and UNICEF are increasing efforts to gather subnational coverage data and support countries in improving the quality and use of the subnational coverage data to take actions to achieve high and equitable immunization coverage.

Introducing under-utilized vaccines

The updated WHO/UNICEF estimates also show that coverage with vaccines other than DTP, has improved. Worldwide, the number of children protected against hepatitis B is high and increasing steadily. In 2000, just 29% of children received three doses of vaccine against the viral disease; this has increased to 84% in 2015. However, more still needs to be done to ensure that all infants receive a hepatitis B vaccine dose within their first 24 hours of life.

Only three countries — China, Russia and Thailand — have yet to introduce Haemophilus influenzae type b (Hib) vaccine, a globally recommended vaccine. Global coverage of Hib

vaccine is 64%. However, in countries that are using the vaccine in their national immunization programmes, coverage is similar to DTP3. Generally, Hib and DTP vaccines are used together in combination vaccines, which help to achieve the same levels of coverage as DTP in countries using the vaccine.

The number of countries using new vaccines such as rotavirus and pneumococcal conjugate vaccine has increased, but challenges remain.

While 128 countries introduced pneumococcal vaccine in national immunization programmes, global coverage for three doses of the vaccine reached just 37% in 2015. Among the middle income countries, the vaccination coverage is only at 24% with 58 out of 104 countries using the vaccine in their national programmes. However, vaccination coverage in low income countries is at 68% with 24 out of 31 countries using the vaccine, mainly with support from Gavi, the Vaccine Alliance and 84% in high income countries, with 45 out of 57 countries using the vaccine.

Additionally, rotavirus vaccine was introduced in 81 countries and global coverage reached 23% in 2015. This also shows under-performance in middle income countries, where vaccination coverage only reached 16% with 44 out of 104 middle income countries using the vaccine; compared to 44% vaccination coverage in low income countries with 18 out of 31 countries using the vaccine, also mainly with Gavi's support; and 40% vaccination coverage in high income countries with 19 out of 57 countries using the vaccine.

Tracking global plan
In October 2016, the WHO Strategic Advisory Group of Experts on Immunization (SAGE) will review progress against the GVAP targets, including the immunization coverage targets, and provide its assessment of progress and recommendations for corrective actions for discussion at the World Health Assembly in May 2017.
Note
Since 2000, WHO and UNICEF jointly produce national immunization coverage estimates for each of the 194 WHO Member States on an annual basis. In addition to producing the immunization coverage estimates for 2015, the WHO and UNICEF estimation process revises the entire historical series of immunization data with the latest available information. The 2015 revision covers 35 years from 1980 to 2015.

Immunization coverage
WHO Fact sheet - 15 July 2016

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Zika virus [to 16 July 2016]
Public Health Emergency of International Concern (PHEIC)
http://www.who.int/emergencies/zika-virus/en/

Zika situation report – 14 July 2016
Full report: http://apps.who.int/iris/bitstream/10665/246222/1/zikasitrep14Jul16-eng.pdf?ua=1
[No significant new content]

Zika Open [to 16 July 2016]
[Bulletin of the World Health Organization]
:: All papers available here
RESEARCH IN EMERGENCIES
Antisense inhibition of selenoprotein synthesis by Zika virus may contribute to neurological disorders and microcephaly by mimicking SePP1 knockout and the genetic disease progressive cerebello-cerebral atrophy
- Ethan Will Taylor & Jan A. Ruzicka
Posted: 13 July 2016
http://dx.doi.org/10.2471/BLT.16.182071

CDC/ACIP [to 16 July 2016]
http://www.cdc.gov/media/index.html
Media Statement
FRIDAY, JULY 15, 2016
First female-to-male sexual transmission of Zika virus infection reported in New York City
The New York City report of female-to-male sexual transmission of Zika virus infection is the first documented case of sexual transmission of Zika from a woman to her sex partner.....

Media Statement
THURSDAY, JULY 14, 2016
CDC adds St. Eustatius to interim travel guidance related to Zika virus
CDC is working with other public health officials to monitor for ongoing Zika virus? transmission. Today, CDC posted a Zika virus travel notice for St. Eustatius.

Media Statement
WEDNESDAY, JULY 13, 2016
CDC Models Risk of Zika Virus Importation Resulting from Travel to the 2016 Olympic and Paralympic Games
According to the Brazilian Tourism Board, approximately 350,000 – 500,000 international visitors and athletes from 207 countries are expected to travel to Rio de Janeiro, Brazil for the 2016 Olympic...

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EBOLA/EVD [to 16 July 2016]
"Threat to international peace and security" (UN Security Council)

[Editor's Note:
We deduce that WHO has suspended issuance of new Situation Reports after resuming them for several weekly cycles. The most recent report posted is EBOLA VIRUS DISEASE – Situation Report - 10 JUNE 2016]

IOM / International Organization for Migration [to 16 July 2016]
http://www.iom.int/press-room/press-releases
07/15/16

IOM Guinea Launches Community Event-Based Surveillance Activities in Forest Region

Guinea - IOM, in partnership with Plan International, this week launched a Community Event-Based Surveillance (CEBS) system in the Forest region prefecture of Macenta on the Guinea-Liberia border to combat the spread of Ebola. The project is funded by the US Centers for Disease Control (CDC).

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POLIO [to 16 July 2016]
Public Health Emergency of International Concern (PHEIC)

Polio this week as of 12 July 2016

:: The Technical Advisory Group on polio eradication for Afghanistan met in Kabul on 11-13 July and reviewed progress towards interrupting the transmission of polio and discussed solutions to upcoming challenges.

:: The Pakistan Technical Advisory Group met in Islamabad on 28-29 June and concluded that a united focus between partners and enhanced community ownership of programme interventions has been key to continuing progress in the country towards eradicating polio. *More.[see below]*

:: The Independent Monitoring Board will meet in London next week to assess progress towards polio eradication.

Selected Country Levels Updates [excerpted]
No new cases at country level reported.

Technical Advisory Group Meets to Assess Eradication Efforts in Pakistan

Experts gathered in Pakistan in June to review progress and to renew plans for the coming months.
Monday, July 04, 2016

The Technical Advisory Group (TAG) on polio eradication has met in Islamabad for the second time this year to discuss progress, remaining obstacles and opportunities as Pakistan edges closer to achieving the goal of stopping transmission of the virus.

Senior leaders from across the Global Polio Eradication Initiative joined Federal and Provincial team leads as they briefed TAG members on the progress made since the last meeting in January 2016. The group also assessed plans for updates to the 2016/17 National Emergency Action Plan leading into the next low transmission season.

Progress in Pakistan

As of the end of June 2016, 12 cases of wild poliovirus type 1 have been reported, a 57 per cent reduction from the same time in 2015. This improvement was attributed by the Global Polio Eradication Initiative to the united front now being presented by the team of partners

working together under the leadership of the government through a network of Emergency Operation Centers. Progress was also ascribed to other strategies, such as the expansion of community based vaccination and health camps, which have helped with enhancing community ownership of the programme interventions. In addition, thousands of trained and dedicated frontline workers have ensured that 280 million children have received polio drops during nine campaigns conducted in the low transmission season. The successful campaigns of the inactivated polio vaccine in targeted high risk areas of Karachi, Khyber Peshawar and Quetta block helped in quick immunity boosting of approximately 3 million vulnerable children…

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Yellow Fever [to 16 July 2016]
http://www.who.int/emergencies/yellow-fever/en/

Yellow Fever - Situation Report – 15 July 2016
Full Report:
http://apps.who.int/iris/bitstream/10665/246224/1/yellowfeversitrep-15Jul16-eng.pdf?ua=1
[No significant new content]

WHO: The many challenges to fighting yellow fever in Democratic Republic of the Congo
11 July 2016
The Democratic Republic of the Congo faces many challenges in responding to the yellow fever outbreak. Access to areas along the Angolan border is extremely difficult and there is a lack of essential resources, such as fuel to run electricity generators.
WHO is working with the government and partners to organize a mass vaccination campaign of approximately 3 million people along the border with Angola. This photo story highlights some of the challenges in providing health services to this remote area.

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MERS-CoV [to 16 July 2016]

No new information posted.

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WHO & Regional Offices [to 16 July 2016]

WHO Grade 3 emergency
WHO and Health Cluster Partners steps up response to the critical health needs in Juba in response to armed conflict that erupted on the 8th July 2016
Juba, 14 July 2016 - In response to the growing humanitarian crisis that has caused deaths, high numbers of civilian injuries in Juba City and the displacement of thousands of residents

fleeing from the conflict, WHO has donated to Juba Teaching Hospital accident and emergency unit trauma kits sufficient to conduct 500 surgeries and various intravenous infusions to save the lives of the increasing number of injured patients. In addition, WHO has provided 100 body bags and personal protective equipment (PPE) for dead body management.

Response to internally displaced persons in South Sudan

July 2016 -- In response to the growing humanitarian crisis and the displacement of thousands of people fleeing Juba City, South Sudan, WHO has donated accident and emergency unit trauma kits sufficient to conduct 500 surgeries to Juba Teaching Hospital in order to save the lives

Key challenges flagged for International AIDS Conference

15 July 2016 – Four key challenges have been flagged by WHO as the international community meets at the International AIDS Conference in Durban, South Africa, from 18–22 July. These challenges include the need to renew attention to HIV prevention while maintaining momentum on scaling up access to HIV treatment, the growing emergence of antiretroviral (ARV) drug resistance, and the need for sustainable financing of the global response.

Highlights

Floods in Myanmar, WHO supporting rapid health assessments and response

July 2016 -- Since the beginning of July 2016 heavy monsoonal rains have hit several areas of Myanmar, resulting in floods in 5 townships of Rakhine State. Around 27 000 people have been affected by flooding and many remain displaced due to high water levels in their townships.

Weekly Epidemiological Record (WER) 15 July 2016, vol. 91, 28/29 (pp. 341–348)

Contents

:: WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

:: President Buhari and WHO Regional Director agree on the need to increase domestic funding for health

Abuja, 13 July 2016 - His Excellency, President Muhammadu Buhari has agreed with Dr Matshidiso Moeti, the World Health Organization (WHO) Regional Director (RD) for Africa, on the need for increasing domestic funding for health in Nigeria.

:: Ministers assure WHO Regional Director that health is a key priority for Nigeria - 12 July 2016

:: WHO Regional Director promises to support Nigeria on primary health care revitalization - 11 July 2016

WHO Region of the Americas PAHO

:: New Global Partnership launches seven strategies to end violence against children (07/12/2016)

:: PAHO reminds travelers to get vaccinated for measles and rubella before the Olympic and Paralympic Games in Rio (07/12/2016)

WHO South-East Asia Region SEARO
:: WHO felicitates India for yaws, maternal and neonatal tetanus elimination 14 July 2016

WHO European Region EURO
:: Conference on health and climate sets European priorities 15-07-2016

WHO Eastern Mediterranean Region EMRO
:: Strengthening the mental health system in Jordan 13 July 2016

WHO Western Pacific Region
No new digest content identified.

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CDC/ACIP [to 16 July 2016]
http://www.cdc.gov/media/index.html
Media Advisory
FRIDAY, JULY 15, 2016
CDC Joins Global Leaders in New Partnership to End Violence Against Children
The new partnership supports individuals and groups working to prevent and respond to violence; protect childhood; and make societies safe for children.

Media Statement
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According to the Brazilian Tourism Board, approximately 350,000 – 500,000 international visitors and athletes from 207 countries are expected to travel to Rio de Janeiro, Brazil for the 2016 Olympic...

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Announcements/Milestones/Perspectives

FAO Food & Agriculture Organization [to 16 July 2016]
http://www.fao.org/news/archive/news-by-date/2016/en/
13-07-2016
As H5N1 spreads in West and Central Africa FAO calls for increased vigilance
Cameroon becomes latest country in region to detect virulent bird flu
Rome - Countries across West and Central Africa are on alert as the highly pathogenic avian influenza virus H5N1continues to spread across the region, with Cameroon becoming the latest African country to detect the disease. The strain can infect and cause death in humans and kills poultry at a high rate.

The latest H5N1 outbreaks were recently confirmed on chicken farms in Cameroon putting the poultry production in the country and its neighbours at high risk. This is the first time the disease has been found in Central Africa since 2006.

This brings the number of countries that have battled bird flu in West and Central Africa to six, also including Burkina Faso, Cote d'Ivoire, Ghana, Niger and Nigeria.

Nigeria continues to be most affected with the total number of outbreaks exceeding 750 with nearly 3.5 million birds dead or culled. The newly recorded outbreaks in Cameroon raise significant concerns that the disease may be advancing southward, triggering national and global emergency responses to contain the disease, and health screenings of poultry workers.

FAO, meanwhile, is alerting neighbouring governments to be vigilant and continue their heightened surveillance and prevention efforts, including common messaging to the public and data sharing between the public health and agriculture sectors.

"We're looking at a quickly spreading disease that has devastating effects on livelihoods in communities," said Abebe Haile Gabriel, FAO Deputy Regional Representative for Africa. "H5N1 causes major losses of nutritious food and threatens farmers' livelihoods, particularly in resource-poor environments where governments have difficulty providing financial compensation for losses," he said, adding that "trade restrictions often pose an additional hardship on already struggling economies."

The H5N1 strain of avian influenza has caused the death of tens of millions of poultry and losses of tens of billions of dollars worldwide since the virus first spread internationally in 2013 — in Cameroon alone, losses have added up to an estimated $20 million, according to local media reports.

FAO is working closely with the World Health Organization (WHO) and the World Organisation for Animal Health (OIE) to offer member-countries assistance, such as risk assessments, contingency planning, technical advice and laboratory material. They also help with investigating potential avian influenza cases in animals and humans and locating the source of infection…

UNAIDS [to 16 July 2016]
http://www.unaids.org/en/resources/presscentre/
Press release
Kaiser/UNAIDS Study Finds Donor Government Funding for HIV Fell in 2015 for First Time in 5 Years
Funding declined from a majority of donor governments assessed, including the U.S.

Donor government funding to support HIV efforts in low- and middle-income countries fell for the first time in five years in 2015, decreasing from US$8.6 billion in 2014 to US$7.5 billion, finds a new report from the Kaiser Family Foundation and the Joint United Nations Programme on HIV/AIDS (UNAIDS) released in advance of the 2016 International AIDS Conference.

Funding for HIV declined for 13 of 14 donor governments assessed in the analysis, in part due to the significant appreciation of the U.S. dollar that resulted in the depreciation of most other donor currencies. Yet even after accounting for this, funding declined for the majority of governments assessed.

Total funding from the U.S. government fell from US$5.6 billion to US$5 billion, but this was mostly due to a timing issue as the U.S. shifted bilateral funds to 2016 while it implements new and expands existing programs. Without counting the US$411 million reduction in bilateral U.S. funding, most of which is expected to be provided in 2016, total funding declined overall by 8 percent.

"The decline in international funding for the HIV response is worrying," said Luiz Loures, UNAIDS Deputy Executive Director. "Countries still need urgent support over the next few years to Fast-Track their responses to HIV, enabling them to end the AIDS epidemic by 2030 and save millions of lives. Diverting resources from the HIV response now will mean much greater human and financial costs over the long-term."..

Press release
UNAIDS warns that after significant reductions, declines in new HIV infections among adults have stalled and are rising in some regions
Globally, new HIV infections among adults and children were reduced by 40% since the peak in 1997. However, new analysis from UNAIDS shows that new HIV infections among adults have stalled, failing to decline for at least five years. The report outlines what is needed to step up prevention efforts

GENEVA, 12 July 2016—A new report by UNAIDS reveals concerning trends in new HIV infections among adults. The Prevention gap report shows that while significant progress is being made in stopping new HIV infections among children (new HIV infections have declined by more than 70% among children since 2001 and are continuing to decline), the decline in new HIV infections among adults has stalled. The report shows that HIV prevention urgently needs to be scaled up among this age group…

Global Fund [to 16 July 2016]
http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=
Selected News Releases
13 July 2016
Latest Results Show Increase in HIV Treatment

GENEVA – Ahead of next week's International AIDS Conference in Durban, South Africa, the Global Fund to Fight AIDS, Tuberculosis and Malaria today released results that show a significant increase in the number of people being treated for HIV.

The results indicate that the Global Fund partnership had provided lifesaving HIV treatment to 9.2 million people by the end of 2015 – an additional 100,000 people each month since mid-2015. More than 54 percent of all the people on treatment for the disease around the world are through Global Fund-supported programs.

"In Abidjan in April, the Global Fund Board approved a Strategy that will deliver impact even further by focusing on women and girls, key populations, resilient and sustainable systems for health, and mobilizing resources for prevention, treatment and care," said Norbert Hauser, Chair of the Board. "But we need continued political commitment and advocacy to reach our collective goals."

Mark Dybul, Executive Director of the Global Fund, added: "We are tremendously inspired by the many partners who have come together and saved the lives of millions of people. However, we cannot let up. New HIV infections among adults are too high. We must invest more in prevention, including in programs to reduce human rights and gender-related barriers."

There has been a dramatic increase in people on HIV treatment since 2000, when leaders, activists and scientists first gathered in Durban, South Africa, to demand that world leaders do more to treat people with HIV. At the time, only 770,000 of 29 million people living with HIV had access to treatment. The cost of HIV treatment was about US$10,000 per year, per person and was out of reach for most people around the world.

Today, the treatment costs less than $100 per person, per year, and a total of 17 million people are accessing antiretroviral treatment across the world with support from governments, civil society, the private sector and communities affected by the diseases…

NIH [to 16 July 2016]
http://www.nih.gov/news-events/news-releases
July 13, 2016
NIH expands investment in HIV cure research
Six research teams to lead collaborative investigations worldwide.

The National Institutes of Health has awarded approximately $30 million in annual funding over the next five years to six research collaborations working to advance basic medical science toward an HIV cure. The awards comprise the second iteration of the Martin Delaney Collaboratory: Towards an HIV-1 Cure program and are a part of President Barack Obama's pledge to invest in HIV cure research. The research program is supported by the National Institute of Allergy and Infectious Diseases (NIAID), the National Institute on Drug Abuse, the National Institute of Mental Health, and the National Institute of Neurological Disorders and Stroke, all part of the NIH.

"The two greatest challenges remaining in HIV/AIDS research are finding a cure and developing a safe and effective preventive vaccine. This year, NIAID has made significant investments toward both of these critical goals," said NIAID Director Anthony S. Fauci, M.D.

"A simple, safe and scalable cure for HIV would accelerate progress toward ending the HIV/AIDS pandemic," he added. "Through the leadership of talented investigators with a diversity of expertise, the Martin Delaney Collaboratory program will accelerate progress in this key research endeavor." Research toward a cure also is an overarching priority for the NIH HIV/AIDS research program…

PATH [to 16 July 2016]
http://www.path.org/news/index.php
Announcement | July 15, 2016
PATH at AIDS 2016
Advancing innovation to end the HIV epidemic
This week, at the 21st International AIDS Conference, taking place July 18–22 in Durban, South Africa, PATH experts will showcase our work mobilizing local communities, public and private partners, governments, and leaders to tackle HIV head on…

Announcement | July 13, 2016
PATH welcomes Dr. Dennis Schmatz to its board of directors
PATH's board of directors has voted to appoint Dennis Schmatz, PhD, to the board. Dr. Schmatz broadens the board's expertise in drug development, program management, and global health initiatives.
"Dennis Schmatz is an internationally respected leader in pharmaceutical research, with extensive experience in global health and managing large research teams," said Dean Allen, chair of PATH's board of directors. "His knowledge will be invaluable as PATH continues to address ongoing and emerging challenges in global health."…

FDA [to 16 July 2016]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
What's New for Biologics
PDA/FDA Annual Joint Regulatory Conference - 25th Anniversary: Aligning Manufacturing Goals with Patient Needs through Successful Innovation and Compliance
September 12 - 14, 2016: The FDA and the Parenteral Drug Association (PDA) are co-sponsoring a public conference to discuss current issues affecting the industry.;
Posted: 7/14/2016
July 11, 2016 Summary Basis for Regulatory Action - Prevnar 13 (PDF - 73KB)
Posted: 7/14/2016
Influenza Virus Vaccine for the 2016-2017 Season
Posted: 7/14/2016
July 11, 2016 Approval Letter - Prevnar 13 (PDF - 27KB)
Posted: 7/12/2016

EDCTP [to 16 July 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.
11 July 2016
Call for experts: EDCTP Scientific Advisory Committee
EDCTP invites applications from high-level experts from across multiple fields and sectors to apply to become members of its Scientific…

11 July 2016
Moses Bockarie joins EDCTP as Director of South-South Cooperation and Head of Africa Office
Professor Moses John Bockarie joined EDCTP as Director of South-South Cooperation and Head of Africa Office on 1 July 2016….

MSF/Médecins Sans Frontières [to 16 July 2016]
http://www.doctorswithoutborders.org/news-stories/press/press-releases
Press release
Greece: MSF Denounces High Price of Vaccines for Refugee Children
ATHENS/NEW YORK, JULY 14, 2016 — Pharmaceutical companies are making it exorbitantly expensive to vaccinate vulnerable children, the international medical humanitarian organization Doctors Without Borders/Médecins Sans Frontières (MSF) warned today, calling on Pfizer and GlaxoSmithKline (GSK) to lower the price of the pneumonia vaccine (PCV) for governments and humanitarian organizations working in emergency contexts.
In recent weeks, MSF has vaccinated more than 5,000 refugee children between six months and 15 years of age in camps and settlements across Greece. Using multiple vaccines, the campaign is targeting 10 diseases including pneumonia, which is the single largest killer of children under five worldwide and is particularly acute in humanitarian crises.
MSF purchased the pneumonia vaccine for 60 euros, or about $68, per dose from local pharmacies in Greece. The price is 20 times more than the lowest global price of the vaccine, which is roughly $3.10 per dose…

Industry Watch [to 16 July 2016]
:: **Pfizer Receives FDA Approval for Prevnar 13® in Adults Age 18 Through 49**
Prevnar 13 is the only pneumococcal vaccine approved in the U.S. for patients 6 weeks through adulthood
July 12, 2016
NEW YORK--(BUSINESS WIRE)--Pfizer Inc. (NYSE:PFE) today announced that Prevnar 13® (Pneumococcal 13-valent Conjugate Vaccine [Diphtheria CRM197 Protein]) received U.S. Food and Drug Administration (FDA) approval for an expanded age indication to include adults 18 through 49 years of age, in addition to the already approved indication for adults 50 years and older, for active immunization for the prevention of pneumonia and invasive disease caused by 13 Streptococcus pneumoniae (S. pneumoniae) serotypes (1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, and 23F). Prevnar 13 is the only pneumococcal vaccine approved across the lifespan.
With today's decision Prevnar 13 is approved for:
:: Adults 18 years of age and older for the prevention of pneumococcal pneumonia and invasive disease caused by 13 Streptococcus pneumoniae strains in the vaccine

:: Children 6 weeks through 17 years of age (prior to the 18th birthday) for the prevention of invasive disease caused by 13 Streptococcus pneumoniae strains in the vaccine

The expanded age indication now more closely aligns with the 2012 U.S. Centers for Disease Control and Prevention's Advisory Committee on Immunizations Practices (ACIP) recommendations for adults 19 years of age and older with immunocompromising conditions (e.g., HIV, chronic renal failure, cancer), functional or anatomic asplenia (e.g., sickle cell disease), cerebral spinal fluid leak, and Cochlear implants. This is in addition to recommendations set forth by ACIP in 2014 for adults 65 years and older.

"This expanded age indication in adults 18 to 49 offers an important public health benefit as appropriate vaccination against S. pneumoniae is critical to reducing the risk of pneumococcal disease, including in those with immunocompromising conditions," said Dr. Luis Jodar, Chief Medical and Scientific Affairs Officer, Pfizer Vaccines…

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AERAS [to 16 July 2016]
http://www.aeras.org/pressreleases
No new digest content identified. New quarterly newsletter released via email…no apparent posting on website.

BMGF - Gates Foundation [to 16 July 2016]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

European Medicines Agency [to 16 July 2016]
http://www.ema.europa.eu/
No new digest content identified.

European Vaccine Initiative [to 16 July 2016]
http://www.euvaccine.eu/news-events
No new digest content identified.

Fondation Merieux [to 16 July 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.

Gavi [to 16 July 2016]
http://www.gavialliance.org/library/news/press-releases/
No new digest content identified.

GHIT Fund [to 16 July 2016]
https://www.ghitfund.org/
GHIT was set up in 2012 with the aim of developing new tools to tackle infectious diseases that devastate the world's poorest people. Other funders include six Japanese pharmaceutical companies, the Japanese Government and the Bill & Melinda Gates Foundation.

No new digest content identified

Hilleman Laboratories [to 16 July 2016]
http://www.hillemanlabs.org/news.aspx
No new digest content identified

Human Vaccines Project [to 16 July 2016]
humanvaccinesproject.org
[Website in development]

IAVI – International AIDS Vaccine Initiative [to 16 July 2016]
http://www.iavi.org/
No new digest content identified

IVI - International Vaccine Institute [to 16 July 2016]
http://www.ivi.org/web/www/home
No new digest content identified

Sabin Vaccine Institute [to 16 July 2016]
http://www.sabin.org/updates/ressreleases
No new digest content identified

UNICEF [to 16 July 2016]
http://www.unicef.org/media/media_89711.html
No new digest content identified

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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

Center for Global Development [to 16 July 2016]
http://www.cgdev.org/page/press-center
7/14/16
Estimating the Avertable Disease Burden and Cost-Effectiveness in Millions Saved Third Edition - Working Paper 429
Andrew Mirelman , Amanda Glassman and Miriam Temin
Millions Saved (2016) is a new edition of detailed case studies on the attributable impact of global health programs at scale. As an input to the book, this paper provides an independent assessment of the cost-effectiveness of a selection of the cases using ex post information from impact evaluations, with the objective of illustrating how economic evaluation can be used in decision making and to provide further evidence on the extent of health gains produced for the funding provided. We reviewed the evidence and calculated the averted disease burden and

cost-effectiveness for a selected group of public health successes, finding that large health gains have been achieved in programs that represent good value for money. Since these cases represent known successes, this is to be expected; however, some key issues emerge. In many cases, estimates of cost-effectiveness are not available for programs at scale and thus estimating efficiency losses and scale-up dynamics is only possible with modeling and by making large assumptions. When assessed in reference to the GDP per capita of the country, many of the programs compare favorably, though the GDP per capita threshold may not be the correct figure for making decisions. Health systems and sectoral interventions, such as those that address access to care or provide resources directly (e.g. cash transfers), present difficulties when estimating standard measures of cost-effectiveness. These difficulties can be partially overcome with high quality studies that evaluate implementation or by using alternative measures of efficiency such as those relating to administrative efficiency. The lessons learned from calculating the cost-effectiveness for many scaled-up programs across a range of health areas and country settings provides lessons for future considerations of the value of scaling up effective health interventions in national health programs.

* * * *

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
July 2016 Volume 44, Issue 7, p739-856, e103-e124
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
July 2016 Volume 51, Issue 1, p1-150, e1-e26
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 106, Issue 7 (July 2016)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
June 2016; 94 (6)
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
5 July 2016, Vol. 165. No. 1
http://annals.org/issue.aspx
[Reviewed earlier]

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 16 July 2016)
[No new content]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 16 July 2016)
[No new relevant content identified]

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 16 July 2016)
[No new relevant content identified]

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 16 July 2016)
Research article
HIV/AIDS clients, privacy and confidentiality; the case of two health centres in the Ashanti Region of Ghana
While most studies on HIV/AIDS often identify stigmatization and patients' unwillingness to access health care as critical problems in the control of the pandemic, very few studies have focused on the possible...
Jonathan Mensah Dapaah and Kodjo A. Senah
BMC Medical Ethics 2016 17:41
Published on: 16 July 2016

Research article
Cluster randomized trial assessing the effects of rapid ethical assessment on informed consent comprehension in a low-resource setting

Adamu Addissie, Serebe Abay, Yeweyenhareg Feleke, Melanie Newport, Bobbie Farsides and Gail Davey
BMC Medical Ethics 2016 17:40
Published on: 12 July 2016

Abstract

Background

Maximizing comprehension is a major challenge for informed consent processes in low-literacy and resource-limited settings. Application of rapid qualitative assessments to improve the informed consent process is increasingly considered useful. This study assessed the effects of Rapid Ethical Assessment (REA) on comprehension, retention and quality of the informed consent process.

Methods

A cluster randomized trial was conducted among participants of HPV sero-prevalence study in two districts of Northern Ethiopia, in 2013. A total of 300 study participants, 150 in the intervention and 150 in the control group, were included in the study. For the intervention group, the informed consent process was designed with further revisions based on REA findings. Informed consent comprehension levels and quality of the consent process were measured using the Modular Informed Consent Comprehension Assessment (MICCA) and Quality of Informed Consent (QuIC) process assessment tools, respectively.

Result

Study recruitment rates were 88.7 % and 80.7 % ($p = 0.05$), while study retention rates were 85.7 % and 70.3 % ($p < 0.005$) for the intervention and control groups respectively. Overall, the mean informed consent comprehension scores for the intervention and control groups were 73.1 % and 45.2 %, respectively, with a mean difference in comprehension score of 27.9 % (95 % CI 24.0 % - 33.4 %; $p < 0.001$,). Mean scores for quality of informed consent for the intervention and control groups were 89.1 % and 78.5 %, respectively, with a mean difference of 10.5 % (95 % CI 6.8 -14.2 %; $p < 0.001$).

Conclusion

Levels of informed consent comprehension, quality of the consent process, study recruitment and retention rates were significantly improved in the intervention group. We recommend REA as a potential modality to improve informed consent comprehension and quality of informed consent process in low resource settings.

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 16 July 2016)
[No new relevant content identified]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 16 July 2016)
[No new relevant content identified]

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles

(Accessed 16 July 2016)
Research article
A systematic review of randomized controlled trials of mHealth interventions against non-communicable diseases in developing countries
The reasons of deaths in developing countries are shifting from communicable diseases towards non-communicable diseases (NCDs). At the same time the number of health care interventions using mobile phones (mHe...
Victor Stephani, Daniel Opoku and Wilm Quentin
BMC Public Health 2016 16:572
Published on: 15 July 2016

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 16 July 2016)
[No new relevant content identified]

BMJ Open
2016, Volume 6, Issue 7
http://bmjopen.bmj.com/content/current
[Reviewed earlier]

Bulletin of the World Health Organization
Volume 94, Number 7, July 2016, 481-556
http://www.who.int/bulletin/volumes/94/7/en/
[Reviewed earlier]

Child Care, Health and Development
May 2016 Volume 42, Issue 3 Pages 297–454
http://onlinelibrary.wiley.com/doi/10.1111/cch.v42.3/issuetoc
[Reviewed earlier]

Clinical Therapeutics
July 2016 Volume 38, Issue 7, p1543-1772
http://www.clinicaltherapeutics.com/current
[New issue; No relevant content identified]

Complexity
May/June 2016 Volume 21, Issue 5 Pages 1–360
http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.5/issuetoc
[Reviewed earlier]

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 16 July 2016]
[No new content]

Contemporary Clinical Trials
Volume 48, (May 2016)
http://www.sciencedirect.com/science/journal/15517144/48
[Reviewed earlier]

Current Opinion in Infectious Diseases
August 2016 - Volume 29 - Issue 4 pp: v-vi,319-431
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
August 2016 Volume 16, Issue 2 Pages 61–120
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-2/issuetoc
[Reviewed earlier]

Development in Practice
Volume 26, Issue 4, 2016
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Disasters
July 2016 Volume 40, Issue 3 Pages 385–588
http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-3/issuetoc
[Reviewed earlier]

Emerging Infectious Diseases
Volume 22, Number 7—July 2016
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

Epidemics
Volume 16, In Progress (September 2016)
http://www.sciencedirect.com/science/journal/17554365
[Reviewed earlier]

Epidemiology and Infection
Volume 144 - Issue 09 - July 2016
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
[Reviewed earlier]

The European Journal of Public Health
Volume 26, Issue 3, 1 June 2016
http://eurpub.oxfordjournals.org/content/26/3?current-issue=y
[Reviewed earlier]

Eurosurveillance
Volume 21, Issue 28, 14 July 2016
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Surveillance report
Réunion Island prepared for possible Zika virus emergence, 2016
by S Larrieu, L Filleul, O Reilhes, M Jaffar-Bandjee, C Dumont, T Abossolo, H Thebault, E Brottet, F Pagès, P Vilain, I Leparc-Goffart, E Antok, D Vandroux, P Poubeau, M Moiton, P Von Theobald, F Chieze, A Gallay, H De Valk, F Bourdillon

Zika emergence in the French Territories of America and description of first confirmed cases of Zika virus infection on Martinique, November 2015 to February 2016
by E Daudens-Vaysse, M Ledrans, N Gay, V Ardillon, S Cassadou, F Najioullah, I Leparc-Goffart, D Rousset, C Herrmann, R Cesaire, M Maquart, O Flusin, S Matheus, P Huc-Anaïs, J Jaubert, A Criquet-Hayot, B Hoen, F Djossou, C Locatelli-Jouans, A Blateau, A McKenzie, M Melin, P Saint-Martin, F Dorléans, C Suivant, L Carvalho, M Petit-Sinturel, A Andrieu, H Noël, A Septfons, A Gallay, M Paty, L Filleul, A Cabié, the Zika Surveillance Working Group
Abstract

Global Health: Science and Practice (GHSP)
June 2016 | Volume 4 | Issue 2
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Public Health
Volume 11, Issue 7-8, 2016
http://www.tandfonline.com/toc/rgph20/current
Special Issue: The trouble with 'Categories': Rethinking men who have sex with men, transgender and their equivalents in HIV prevention and health promotion
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/

[Accessed 16 July 2016]
Commentary
Civil society: the catalyst for ensuring health in the age of sustainable development
Julia Smith, Kent Buse and Case Gordon
Published on: 16 July 2016
Abstract
Sustainable Development Goal Three is rightly ambitious, but achieving it will require doing global health differently. Among other things, progressive civil society organisations will need to be recognised and supported as vital partners in achieving the necessary transformations. We argue, using illustrative examples, that a robust civil society can fulfill eight essential global health functions. These include producing compelling moral arguments for action, building coalitions beyond the health sector, introducing novel policy alternatives, enhancing the legitimacy of global health initiatives and institutions, strengthening systems for health, enhancing accountability systems, mitigating the commercial determinants of health and ensuring rights-based approaches. Given that civil society activism has catalyzed tremendous progress in global health, there is a need to invest in and support it as a global public good to ensure that the 2030 Agenda for Sustainable Development can be realised.

Health Affairs
June 2016; Volume 35, Issue 6
http://content.healthaffairs.org/content/current
Behavioral Health
[Full issue oriented around mental health themes]
[Reviewed earlier]

Health and Human Rights
Volume 18, Issue 1, June 2016
http://www.hhrjournal.org/
Special Section: Tuberculosis and the Right to Health
in collaboration with the International Human Rights Clinic, University of Chicago Law School
[Reviewed earlier]

Health Economics, Policy and Law
Volume 11 - Issue 03 - July 2016
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[Reviewed earlier]

Health Policy and Planning
Volume 31 Issue 5 June 2016
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems

http://www.health-policy-systems.com/content
[Accessed 16 July 2016]
[No new content]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 12, Issue 5, 2016
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

Humanitarian Exchange Magazine
Number 66 April 2016
http://odihpn.org/magazine/humanitarian-innovation/
Special Focus: Humanitarian Innovation
by Humanitarian Practice Network and Kim Scriven April 2016
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 16 July 2016]
[No new relevant content]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 16 July 2016]
Research Article
Optimal control analysis of Ebola disease with control strategies of quarantine and vaccination
Muhammad Dure Ahmad, Muhammad Usman, Adnan Khan and Mudassar Imran
Published on: 13 July 2016
Abstract
Background
The 2014 Ebola epidemic is the largest in history, affecting multiple countries in West Africa. Some isolated cases were also observed in other regions of the world.
Method
In this paper, we introduce a deterministic SEIR type model with additional hospitalization, quarantine and vaccination components in order to understand the disease dynamics. Optimal control strategies, both in the case of hospitalization (with and without quarantine) and vaccination are used to predict the possible future outcome in terms of resource utilization for disease control and the effectiveness of vaccination on sick populations. Further, with the help of uncertainty and sensitivity analysis we also have identified the most sensitive parameters which effectively contribute to change the disease dynamics. We have performed mathematical analysis with numerical simulations and optimal control strategies on Ebola virus models.
Results

We used dynamical system tools with numerical simulations and optimal control strategies on our Ebola virus models. The original model, which allowed transmission of Ebola virus via human contact, was extended to include imperfect vaccination and quarantine. After the qualitative analysis of all three forms of Ebola model, numerical techniques, using MATLAB as a platform, were formulated and analyzed in detail. Our simulation results support the claims made in the qualitative section.
Conclusion
Our model incorporates an important component of individuals with high risk level with exposure to disease, such as front line health care workers, family members of EVD patients and Individuals involved in burial of deceased EVD patients, rather than the general population in the affected areas. Our analysis suggests that in order for R 0 (i.e., the basic reproduction number) to be less than one, which is the basic requirement for the disease elimination, the transmission rate of isolated individuals should be less than one-fourth of that for non-isolated ones. Our analysis also predicts, we need high levels of medication and hospitalization at the beginning of an epidemic. Further, optimal control analysis of the model suggests the control strategies that may be adopted by public health authorities in order to reduce the impact of epidemics like Ebola.

International Health
Volume 8 Issue 3 May 2016
http://inthealth.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Epidemiology
Volume 45 Issue 2 April 2016
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Infectious Diseases
July 2016 Volume 48, p1-124 Open Access
http://www.ijidonline.com/current
[Reviewed earlier]

JAMA
July 12, 2016, Vol 316, No. 2
http://jama.jamanetwork.com/issue.aspx
Viewpoint | July 12, 2016
An HIV Vaccine -Mapping Uncharted Territory FREE
Anthony S. Fauci, MD1
JAMA. 2016;316(2):143-144. doi:10.1001/jama.2016.7538.
Scaling up access to antiretroviral therapy and proven approaches to HIV prevention potentially could control the HIV/AIDS pandemic and reduce it to a low level of endemicity. However, a safe and effective HIV vaccine would help reach this goal more quickly and in a more sustained way.

The scientific quest for an HIV vaccine spans nearly 3 decades and has taken multiple pathways, including attempts to induce antibody responses, T-cell responses, or combinations of both. These efforts have included human efficacy trials of monomeric HIV envelope glycoproteins, vectors containing inserts of HIV genes expressing envelope and other viral proteins, and prime-boost regimens that combine both approaches.[1]

So far, the only HIV vaccine efficacy trial to show promise was the RV144 trial conducted in Thailand. For immunogens, this study used a canarypox vector expressing HIV genes as a prime, followed by 2 booster injections of a recombinant HIV envelope glycoprotein.[2] The trial resulted in a very modest vaccine efficacy of 31%. Neither broadly neutralizing antibodies nor cytolytic $CD8^+$ T-cell responses were associated with protection against infection. Rather, IgG antibodies against the V1V2 region of the HIV envelope protein were associated with reduced infection.[3] Efforts are now under way to improve on the results of RV144 in a southern African population by using multiple boosts, modified vectors, and adjuvants.

In addition to the follow-up of RV144, major HIV vaccine efforts have been launched in another direction: inducing broadly neutralizing antibodies (bNAbs) that can neutralize a wide range of HIV variants and hence afford protection against the rapidly mutating virus.[1]

Neutralizing antibodies have long been considered the "gold standard" of protection for vaccines against viruses because of the consistent observation that essentially all viral infections induce neutralizing antibodies, typically within days of infection. If the patient survives the infection, neutralizing antibodies usually clear the virus and provide lifelong protection against subsequent exposure to the same virus. Thus, the proof of concept for the development of a vaccine for most viruses is already provided by natural infection, and vaccines that optimally mimic natural infection have been the norm.

Not so for an HIV vaccine. The antigens presented by HIV to the immune system in natural infection do not elicit an adequate immune response to clear a virus that integrates,[4] as evidenced by the lack of documented immune-mediated clearance of the virus by any known HIV-infected individual. HIV elicits high levels of broadly neutralizing antibodies in only a fraction of patients, usually only after a period of 2 or more years.[1] With HIV, proving it is even possible for a vaccine to induce such antibodies is being explored by vaccinologists who are working in previously uncharted territory.

In their pursuit of bNAbs against HIV, scientists have used technologies that never before had been required (or even considered) in developing vaccines for other pathogens.[1] These include x-ray crystallography and more recently cryoelectron microscopy to determine the native conformation of HIV envelope; novel cellular cloning technologies to isolate the rare B cells that recognize HIV envelope epitopes; high-throughput deep sequencing of B-cell genes and the unprecedented interrogation of the B-cell lineage to identify unmutated, germline B cells that might bind to known HIV envelope epitopes; and approaches to "steering" the B-cell lineage to make bNAbs.

The leading candidate for an HIV vaccine immunogen that elicits bNAbs is the viral envelope glycoprotein in forms that present native envelope epitopes. The HIV envelope is inherently unstable; in natural infection it preferentially presents to the immune system epitopes that elicit antibodies that are not broadly neutralizing, and that would be inadequate in the context of a

vaccine. Investigators have determined that non-neutralizing antibodies bind to structures displayed on the unstable envelope, whereas several bNAbs bind readily to structural elements expressed on an experimentally stabilized envelope trimer.

A reasonable assumption, then, would be that the stable HIV envelope trimer may serve as a component of an immunogen to engage the relevant HIV-specific B-cell repertoire and induce it to produce bNAbs. Using the structural biological tools of x-ray crystallography and most recently the elegant technique of cryoelectron microscopy, investigators have successfully identified the near-native structure of the envelope trimer and stabilized it by insertion of various mutations.[5] However, that was only the first step. The next step is to engage (if possible) the unmutated, naive B cells that give rise to bNAbs. These B cells are rare, occurring as infrequently as 1 in 2.5 million cells.

A major challenge encountered by scientists is that certain HIV envelope epitopes to which naturally occurring bNAbs bind do not bind to any identifiable germline B cell. Another potential obstacle was observed in an animal model: vaccination with a stable envelope trimer induced autologous neutralizing antibodies but not bNAbs.[6] Thus, the process of generating bNAbs did not achieve its intended goal.

Subsequent efforts have been intensively directed at overcoming the inability to get past autologous neutralizing antibodies and proceed to production of bNAbs, notably with a new strategy that has been called "B-cell lineage design." This concept was exemplified by a fortuitous experiment of nature. In an acute HIV infection study with extremely close follow-up of study participants, a patient who became infected was studied from the very earliest point after acute HIV infection.[7] Scientists closely monitored the evolution of the antibody response and how the virus mutated to escape that evolving immune response. What unfolded was a back-and-forth of mutating virus escaping the immune response and the immune response evolving to keep up with the mutating virus. At the end of more than 2 years, the virus had coaxed along the immune response to produce antibodies that were broadly neutralizing for a wide variety of archived HIV isolates. However, the patient still had virus that was not neutralized by the resulting bNAb.[7] Nonetheless, this observation fortified the concept of "B-cell lineage design" and the pursuit of sequential stimulation of the B-cell lineage with slightly different immunogens that mimic the evolving and mutating virus. Clearly, this strategy is quite different from the classic approach in vaccinology of priming and boosting with essentially the same antigen. The technically complex and intense interrogation and engagement of the B-cell limb of the immune response has provided some of the most elegant scientific studies performed in the context of vaccine development. However, it is unclear whether the application of this approach will be feasible in the context of a vaccine for millions of people.

Indeed, the field of HIV vaccinology is in uncharted territory. If efforts in developing an HIV vaccine based on the induction of bNAbs are successful, this achievement will represent the most elegant and complex scientific approach toward any vaccine in history. In contrast, if unsuccessful, this experience will be recorded as the most highly sophisticated and scientifically elegant proof that the development of such a vaccine is impossible. Hopefully, the former and not the latter will be true.

Viewpoint
Marking Time in the Global HIV/AIDS Pandemic FREE

Gerald Friedland, MD
[Excerpt]
…The IAS conference returns to Durban in July 2016, and presents a unique opportunity to review the 15 years since the landmark 2000 meeting. It will document the current status of the global pandemic and consider and plan the future goals and strategies for the global struggle against HIV/AIDS.

Remarkably, a historic turn of events has been achieved during the past 15 years, representing perhaps one of the greatest scientific, medical, and public health realignment of resources between rich and poor. Resources and expertise have been shifted toward those poorer communities and populations in the world where the epidemic has reached full force. Research support has increased and has demonstrated the importance of new treatment and prevention tools and strategies of global benefit. Local governments and international agencies such as the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization; the Global Fund on AIDS, Tuberculosis, and Malaria; the US President's Emergency Plan for AIDS Relief; other nations' programs; nongovernmental organizations; academic institutions; private philanthropy; and other efforts have been assembled to meaningfully counteract the global pandemic, providing evidence-based prevention and treatment and attempting to reduce many of the issues of equity and health disparities at the pandemic's core.

New HIV infections have declined by 35% since 2000 and the number of people accessing ART globally has doubled every 3 to 4 years, increasing exponentially from an estimated 690 000 in 2000 (the vast majority in the developed world) to 3 million in 2007 and to 17 million people at the end of 2015.[3] Of these, 10.3 million (61%) were in sub-Saharan Africa. Global coverage of ART increased from less than 5% in 2000 to 46% at the end of 2015.[4] South Africa has the largest HIV epidemic in the world, with an estimated 6.3 million people living with HIV in 2013, but now has initiated ART for nearly 3.4 million people living with HIV/AIDS, more than any other country in the world.[4] Studies have demonstrated a restoration of life expectancy on a population level, similar to what had been seen in the United States after the introduction of ART[5] and population-based declines in HIV transmission were shown as ART was rolled out.

The past 15 years also have seen a large increase in effective HIV prevention tools, including condoms, harm reduction, male circumcision, and vaginal microbicides as well as structural (ie, policies, laws, institutional, and administrative approaches) and community-based approaches. The availability and use of ART remains the most potent tool, both as treatment and prevention of new infections in maternal to child transmission, HIV discordant partners,[6] and, most recently, as preexposure prophylaxis.[7] All of these strategies, including those that address fundamental human rights, must be used in combination to provide the greatest benefit. With these effective tools and strategies, is the world now on the cusp of another epochal change in the pandemic?

The power of combining treatment and prevention has resulted in the formulation by UNAIDS of the 90-90-90 strategy to be accomplished by 2020.[8] This is defined as 90% of all people living with HIV will know their HIV status, 90% of these will receive sustained ART, and 90% of these will have viral suppression. Further extending this to 2030 with a strategy of 95-95-95 is estimated to avert an additional 17.6 million HIV infections and 10.8 million AIDS-related deaths between 2016 and 2030,[8] and carries the expectation that the pandemic will be eliminated (ie,

the global prevalence of HIV will be reduced to a negligible amount and no longer represent a global public health threat).

However, enormous challenges remain in reaching these goals. They include the difficulties of engaging key populations with the treatment and prevention benefits, the fragility and weakness of the health care systems needed for their delivery, the fact that neither a vaccine nor cure is expected within this time frame and ART remains a lifelong therapy with challenges of linkage to care, medication adherence, and loss to follow-up all impinging on sustained viral suppression. Continued stigma and intractable human rights challenges, comorbidities, such as tuberculosis (the leading cause of mortality in people living with HIV/AIDS), and increasingly drug-resistant tuberculosis, all pose major hurdles.

In addition, it is unclear whether the costs to local and international communities will be bearable, estimated as increasing from the current $19 billion per year to $36 billion per year, and whether political will can be sustained over time.[9] A central question at the 2016 IAS conference will be if, with the now-available powerful prevention and treatment tools, these goals and strategies are realistic and attainable or, at best, only aspirational.

The accomplishments of the past 15 years were similarly deemed unrealistic and aspirational, and perhaps such a triumph of global success will be repeated and the HIV/AIDS pandemic not only can be reversed, but contained. The 2016 IAS meeting in Durban will again provide a view of the present and a glimpse into the future of the still disastrous and volatile HIV/AIDS pandemic.

Editorials
Condomless Sex With Virologically Suppressed HIV-Infected Individuals: How Safe Is It? FREE
Eric S. Daar, MD; Katya Corado, MD

Antiretrovirals for HIV Treatment and Prevention: The Challenges of Success FREE
Kenneth H. Mayer, MD; Douglas S. Krakower, MD

Visions for an AIDS-Free Generation: Red Ribbons of Hope FREE
Preeti N. Malani, MD, MSJ

Original Investigations
Effect of Patient Navigation With or Without Financial Incentives on Viral Suppression Among Hospitalized Patients With HIV Infection and Substance Use: A Randomized Clinical Trial FREE
Lisa R. Metsch, PhD; Daniel J. Feaster, PhD; Lauren Gooden, PhD; Tim Matheson, PhD; Maxine Stitzer, PhD; Moupali Das, MD; Mamta K. Jain, MD; Allan E. Rodriguez, MD; Wendy S. Armstrong, MD; Gregory M. Lucas, MD, PhD; Ank E. Nijhawan, MD; Mari-Lynn Drainoni, PhD; Patricia Herrera, MD; Pamela Vergara-Rodriguez, MD; Jeffrey M. Jacobson, MD; Michael J. Mugavero, MD; Meg Sullivan, MD; Eric S. Daar, MD; Deborah K. McMahon, MD; David C. Ferris, MD; Robert Lindblad, MD; Paul VanVeldhuisen, PhD; Neal Oden, PhD; Pedro C. Castellón, MPH; Susan Tross, PhD; Louise F. Haynes, MSW; Antoine Douaihy, MD; James L. Sorensen, PhD; David S. Metzger, PhD; Raul N. Mandler, MD; Grant N. Colfax, MD; Carlos del Rio, MD
Includes: Supplemental Content

Sexual Activity Without Condoms and Risk of HIV Transmission in Serodifferent Couples When the HIV-Positive Partner Is Using Suppressive Antiretroviral Therapy FREE
Alison J. Rodger, MD; Valentina Cambiano, PhD; Tina Bruun, RN; Pietro Vernazza, MD; Simon Collins; Jan van Lunzen, PhD; Giulio Maria Corbelli; Vicente Estrada, MD; Anna Maria Geretti, MD; Apostolos Beloukas, PhD; David Asboe, FRCP; Pompeyo Viciana, MD; Félix Gutiérrez, MD; Bonaventura Clotet, PhD; Christian Pradier, MD; Jan Gerstoft, MD; Rainer Weber, MD; Katarina Westling, MD; Gilles Wandeler, MD; Jan M. Prins, PhD; Armin Rieger, MD; Marcel Stoeckle, MD; Tim Kümmerle, PhD; Teresa Bini, MD; Adriana Ammassari, MD; Richard Gilson, MD; Ivanka Krznaric, PhD; Matti Ristola, PhD; Robert Zangerle, MD; Pia Handberg, RN; Antonio Antela, PhD; Sris Allan, FRCP; Andrew N. Phillips, PhD; Jens Lundgren, MD; for the PARTNER Study Group
Includes: CME, Supplemental Content
Editorial: Condomless Sex With Virologically Suppressed HIV-Infected Individuals;
Eric S. Daar, MD; Katya Corado, MD

Association of Medical Male Circumcision and Antiretroviral Therapy Scale-up With Community HIV Incidence in Rakai, Uganda FREE
Xiangrong Kong, PhD; Godfrey Kigozi, MB, ChB, PhD; Joseph Ssekasanvu, MS; Fred Nalugoda, PhD; Gertrude Nakigozi, MD, MPH; Anthony Ndyanabo, MSc; Tom Lutalo, MS; Steven J. Reynolds, MD, MPH; Robert Ssekubugu, MHS; Joseph Kagaayi, MB, ChB, PhD; Eva Bugos, BS; Larry W. Chang, MD, MPH; Pilgrim Nanlesta, PhD; Grabowski Mary, PhD; Amanda Berman, MSPH, MPhil; Thomas C. Quinn, MD; David Serwadda, MB, ChB, MMed, MPH; Maria J. Wawer, MD, MSH; Ronald H. Gray, MD, MSc
Includes: CME, Supplemental Content

Special Communication
Antiretroviral Drugs for Treatment and Prevention of HIV Infection in Adults: 2016 Recommendations of the International Antiviral Society–USA Panel FREE
Huldrych F. Günthard, MD; Michael S. Saag, MD; Constance A. Benson, MD; Carlos del Rio, MD; Joseph J. Eron, MD; Joel E. Gallant, MD, MPH; Jennifer F. Hoy, MBBS, FRACP; Michael J. Mugavero, MD, MHSc; Paul E. Sax, MD; Melanie A. Thompson, MD; Rajesh T. Gandhi, MD; Raphael J. Landovitz, MD; Davey M. Smith, MD; Donna M. Jacobsen, BS; Paul A. Volberding, MD
Includes: CME, Supplemental Content
Editorial: Antiretrovirals for HIV Treatment and Prevention; Kenneth H. Mayer, MD; Douglas S. Krakower, MD

From the JAMA Network
Reaching High-Risk Patients for HIV Preexposure Prophylaxis FREE
James Riddell IV, MD; Jonathan A. Cohn, MD, MS

JAMA Pediatrics
July 2016, Vol 170, No. 7
http://archpedi.jamanetwork.com/issue.aspx
[Reviewed earlier]

Journal of Community Health
Volume 41, Issue 4, August 2016
http://link.springer.com/journal/10900/41/3/page/1
Original Paper
Factors Influencing Seasonal Influenza Vaccination Uptake in Emergency Medical Services Workers: A Concept Mapping Approach
Dipti P. Subramaniam, Elizabeth A. Baker, Alan P. Zelicoff…

Original Paper
Poor HPV vaccine-related awareness and knowledge among Utah Latinas overdue for recommended cancer screenings
Brynn Fowler, Julia Bodson, Echo L. Warner, Jane Dyer…

Journal of Epidemiology & Community Health
July 2016, Volume 70, Issue 7
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 12, Issue 1, 2016
http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0l#.VAJEj2N4WF8
[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)
April-June 2016 Volume 8 | Issue 2 Page Nos. 59-94
http://www.jgid.org/currentissue.asp?sabs=n
[New issue; No new relevant content identified]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 27, Number 2, May 2016 Supplement
https://muse.jhu.edu/issue/33442
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 18, Issue 4, August 2016
http://link.springer.com/journal/10903/18/4/page/1
Issue focus: Mental Health and Substance Use

Journal of Immigrant & Refugee Studies
Volume 14, Issue 2, 2016
http://www.tandfonline.com/toc/wimm20/current
[Reviewed earlier]

Journal of Infectious Diseases
Volume 214 Issue 3 August 1, 2016
http://jid.oxfordjournals.org/content/current
[New issue; No new 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
July 2016, Volume 42, Issue 7
http://jme.bmj.com/content/current
[Reviewed earlier]

Journal of Medical Internet Research
Vol 18, No 7 (2016): July
http://www.jmir.org/2016/7
[Reviewed earlier]

Journal of Medical Microbiology
Volume 65, Issue 6, June 2016
http://jmm.microbiologyresearch.org/content/journal/jmm/65/6;jsessionid=1lt6u71kmvfue.x-sgm-live-02
[New issue; No relevant content identified]

Journal of Patient-Centered Research and Reviews
Volume 3, Issue 2 (2016)
http://digitalrepository.aurorahealthcare.org/jpcrr/
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 5 Issue 2 June 2016
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Pediatrics
July 2016 Volume 174, p1-286
http://www.jpeds.com/current
[New issue; No relevant content identified]

Journal of Public Health Policy
Volume 37, Issue 2 (May 2016)
http://link.springer.com/journal/41271/37/2/page/1
[Reviewed earlier]

Journal of the Royal Society – Interface
01 June 2016; volume 13, issue 119
http://rsif.royalsocietypublishing.org/content/current
[Reviewed earlier]

Journal of Virology
July 2016, volume 90, issue 14
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Jul 16, 2016 Volume 388 Number 10041 p211-306
http://www.thelancet.com/journals/lancet/issue/current
[New issue; No relevant content identified]

The Lancet Infectious Diseases
Jul 2016 Volume 16 Number 7 p753-866 e108-e138
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Lancet Global Health
Jul 2016 Volume 4 Number 7 e427-e501
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 20, Issue 8, August 2016
http://link.springer.com/journal/10995/20/8/page/1
[Reviewed earlier]

Medical Decision Making (MDM)
July 2016; 36 (5)
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
June 2016 Volume 94, Issue 2 Pages 225–435
http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2016.94.issue-2/issuetoc
[Reviewed earlier]

Nature
Volume 535 Number 7611 pp22-318 14 July 2016
http://www.nature.com/nature/current_issue.html
[New issue; No relevant content identified]

Nature Medicine
July 2016, Volume 22 No 7 pp693-705
http://www.nature.com/nm/journal/v22/n6/index.html
[Reviewed earlier]

Nature Reviews Immunology
July 2016 Vol 16 No 7
http://www.nature.com/nri/journal/v16/n6/index.html
[Reviewed earlier]

New England Journal of Medicine
July 14, 2016 Vol. 375 No. 2
http://www.nejm.org/toc/nejm/medical-journal
Perspective
History of Clinical Trials: Medicine, Monopoly, and the Premodern State — Early Clinical Trials
A. Rankin and J. Rivest

Pediatrics
July 2016, VOLUME 138 / ISSUE 1
http://pediatrics.aappublications.org/content/138/1?current-issue=y
[Reviewed earlier]

Pharmaceutics
Volume 8, Issue 2 (June 2016)

http://www.mdpi.com/1999-4923/8/2
[Reviewed earlier]

PharmacoEconomics
Volume 34, Issue 7, July 2016
http://link.springer.com/journal/40273/34/7/page/1
[New issue; No new relevant content identified]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 16 July 2016]
[No new relevant content identified]

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
(Accessed 16 July 2016)
[No new relevant content identified]

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 16 July 2016)
[No new relevant content identified]

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
[Accessed 16 July 2016]

The Vaccination of 35,000 Dogs in 20 Working Days Using Combined Static Point and Door-to-Door Methods in Blantyre, Malawi
Andrew D Gibson, Ian G Handel, Kate Shervell, Tarryn Roux, Dagmar Mayer, Stanford Muyila, Golden B Maruwo, Edwin M. S Nkhulungo, Rachel A Foster, Patrick Chikungwa, Bernard Chimera, Barend M.deC Bronsvoort, Richard J Mellanby, Luke Gamble
Research Article | published 14 Jul 2016 | PLOS Neglected Tropical Diseases
http://dx.doi.org/10.1371/journal.pntd.0004824

Safety Overview of a Recombinant Live-Attenuated Tetravalent Dengue Vaccine: Pooled Analysis of Data from 18 Clinical Trials
Sophia Gailhardou, Anna Skipetrova, Gustavo H. Dayan, John Jezorwski, Melanie Saville, Diane Van der Vliet, T. Anh Wartel
Research Article | published 14 Jul 2016 | PLOS Neglected Tropical Diseases
http://dx.doi.org/10.1371/journal.pntd.0004821

Post-Marketing Surveillance of Human Rabies Diploid Cell Vaccine (Imovax) in the Vaccine Adverse Event Reporting System (VAERS) in the United States, 1990–2015

Pedro L. Moro, Emily Jane Woo, Wendy Paul, Paige Lewis, Brett W. Petersen, Maria Cano
Research Article | published 13 Jul 2016 | PLOS Neglected Tropical Diseases
http://dx.doi.org/10.1371/journal.pntd.0004846

PLoS One

http://www.plosone.org/
[Accessed 16 July 2016]
Research Article

Community Willingness to Participate in a Dengue Study in Aceh Province, Indonesia

Harapan Harapan, Samsul Anwar, Aslam Bustaman, Arsil Radiansyah, Pradiba Angraini, Riny Fasli, Salwiyadi Salwiyadi, Reza Akbar Bastian, Ade Oktiviyari, Imaduddin Akmal, Muhammad Iqbalamin, Jamalul Adil, Fenni Henrizal, Darmayanti Darmayanti, Rovy Pratama, Jonny Karunia Fajar, Abdul Malik Setiawan, Allison Imrie, Ulrich Kuch, David Alexander Groneberg, R. Tedjo Sasmono, Meghnath Dhimal, Ruth Müller
Research Article | published 12 Jul 2016 | PLOS ONE
http://dx.doi.org/10.1371/journal.pone.0159139
Abstract

Background
Dengue virus infection is the most rapidly spreading vector-borne disease in the world. Essential research on dengue virus transmission and its prevention requires community participation. Therefore, it is crucial to understand the factors that are associated with the willingness of communities in high prevalence areas to participate in dengue research. The aim of this study was to explore factors associated with the willingness of healthy community members in Aceh province, Indonesia, to participate in dengue research that would require phlebotomy.
Methodology/Principal Findings
A community-based cross-sectional study was carried out in nine regencies and municipalities of Aceh from November 2014 to March 2015. Interviews using a set of validated questionnaires were conducted to collect data on demography, history of dengue infection, socioeconomic status, and knowledge, attitude and practice regarding dengue fever. Two-step logistic regression and Spearman's rank correlation (rs) analysis were used to assess the influence of independent variables on dependent variables. Among 535 participants, less than 20% had a good willingness to participate in the dengue study. The factors associated with good willingness to participate were being female, working as a civil servant, private employee or entrepreneur, having a high socioeconomic status and good knowledge, attitude and practice regarding dengue. Good knowledge and attitude regarding dengue were positive independent predictors of willingness to participate (OR: 2.30 [95% CI: 1.36–3.90] and 3.73 [95% CI: 2.24–6.21], respectively).
Conclusion/Significance
The willingness to participate in dengue research is very low among community members in Aceh, and the two most important associated factors are knowledge and attitude regarding dengue. To increase participation rate, efforts to improve the knowledge and attitude of community members regarding dengue fever and dengue-related research is required before such studies are launched.

PLoS Pathogens

http://journals.plos.org/plospathogens/
(Accessed 16 July 2016)
[No new relevant content identified]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
(Accessed 16 July 2016)
Social Sciences - Social Sciences - Biological Sciences - Medical Sciences:
Equity and length of lifespan are not the same
Benjamin Seligman, Gabi Greenberg, and Shripad Tuljapurkar
PNAS 2016 ; published ahead of print July 11, 2016, doi:10.1073/pnas.1601112113
Significance
We find that the causes of death that have led to greater equality among lifespans are different from the causes that have led to longer average lifespan, also called life expectancy. Control of leading causes of death, such as heart disease, increased life expectancy, whereas medical interventions on infant mortality led to greater equality. Action to promote health equity will require further mitigation of the killers of young people rather than solely focusing on the most common causes of death.
Abstract
Efforts to understand the dramatic declines in mortality over the past century have focused on life expectancy. However, understanding changes in disparity in age of death is important to understanding mechanisms of mortality improvement and devising policy to promote health equity. We derive a novel decomposition of variance in age of death, a measure of inequality, and apply it to cause-specific contributions to the change in variance among the G7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) from 1950 to 2010. We find that the causes of death that contributed most to declines in the variance are different from those that contributed most to increase in life expectancy; in particular, they affect mortality at younger ages. We also find that, for two leading causes of death [cancers and cardiovascular disease (CVD)], there are no consistent relationships between changes in life expectancy and variance either within countries over time or between countries. These results show that promoting health at younger ages is critical for health equity and that policies to control cancer and CVD may have differing implications for equity.

Prehospital & Disaster Medicine
Volume 31 - Issue 03 - June 2016
https://journals.cambridge.org/action/displayIssue?jid=PDM&tab=currentissue
[Reviewed earlier]

Preventive Medicine
Volume 88, Pages 1-240 (July 2016)
http://www.sciencedirect.com/science/journal/00917435/88
[Reviewed earlier]

Proceedings of the Royal Society B
10 February 2016; volume 283, issue 1824
http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y
[Reviewed earlier]

Public Health Ethics
Volume 9 Issue 16 July 2016
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Public Health Reports
Volume 131 , Issue Number 3 May/June 2016
http://www.publichealthreports.org/issuecontents.cfm?Volume=131&Issue=3
Republicanism Special Symposium
[Reviewed earlier]

Qualitative Health Research
July 2016; 26 (9)
http://qhr.sagepub.com/content/current
Special Issue: Seeking Wellness
[Reviewed earlier]

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 16 July 2016]
Study protocol
Zika virus infection in pregnant women in Honduras: study protocol
Although there is increasing evidence for a relationship between symptomatic Zika virus (ZIKV) maternal infection, and microcephaly, a firm causal relation has yet to be established by epidemiologic studies.
Pierre Buekens, Jackeline Alger, Fernando Althabe, Eduardo Bergel, Amanda M. Berrueta, Carolina Bustillo, Maria-Luisa Cafferata, Emily Harville, Karla Rosales, Dawn M. Wesson and Concepcion Zuniga
Reproductive Health 2016 13:82
Published on: 16 July 2016

Research
Male involvement in reproductive, maternal and child health: a qualitative study of policymaker and practitioner perspectives in the Pacific
The importance of involving men in reproductive, maternal and child health programs is increasingly recognised globally. In the Pacific region, most maternal and child health services do not actively engage ex...
Jessica Davis, Joseph Vyankandondera, Stanley Luchters, David Simon and Wendy Holmes
Reproductive Health 2016 13:81

Published on: 16 July 2016

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
February 2016 Vol. 39, No. 2
http://www.paho.org/journal/
[Reviewed earlier]

Risk Analysis
June 2016 Volume 36, Issue 6 Pages 1069–1286
http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-5/issuetoc
[Reviewed earlier]

Risk Management and Healthcare Policy
Volume 9, 2016
https://www.dovepress.com/risk-management-and-healthcare-policy-archive56
[Accessed 16 July 2016]
Original Research
The Lebanese–Syrian crisis: impact of influx of Syrian refugees to an already weak state
Cherri Z, Arcos González P, Castro Delgado R
Risk Management and Healthcare Policy 2016, 9:165-172
Published Date: 14 July 2016
Abstract
Background: Lebanon, a small Middle Eastern country facing constant political and national unity challenges with a population of approximately 300,000 Palestinian and Iraqi refugees, has welcomed more than 1.2 million Office of the United Nations Commissioner for Refugees (UNHCR)-registered Syrian refugees since 2012. The Government of Lebanon considers individuals who crossed Lebanese–Syrian borders since 2011 as "displaced", emphasizing its long-standing position that Lebanon is not a state for refugees, refusing to establish camps, and adopting a policy paper to reduce their numbers in October 2014. Humanitarian response to the Syrian influx to Lebanon has been constantly assembling with the UNHCR as the main acting body and the Lebanon Crisis Response Plan as the latest plan for 2016.
Methods: Review of secondary data from gray literature and reports focusing on the influx of Syrian refugees to Lebanon by visiting databases covering humanitarian response in complex emergencies. Limitations include obtaining majority of the data from gray literature and changing statistics due to the instability of the situation.
Results: The influx of Syrian refugees to Lebanon, an already weak and vulnerable state, has negatively impacted life in Lebanon on different levels including increasing demographics, regressing economy, exhausting social services, complicating politics, and decreasing security as well as worsened the life of displaced Syrians themselves.
Conclusion: Displaced Syrians and Lebanese people share aggravating hardships of a mutual and precarious crisis resulting from the Syrian influx to Lebanon. Although a lot of response has been initiated, both populations still lack much of their basic needs due to lack of funding and nonsustainable program initiatives. The two major recommendations for future interventions

are to ensure continuous and effective monitoring and sustainability in order to alleviate current and future suffering in Lebanon.

Science
15 July 2016 Vol 353, Issue 6296
http://www.sciencemag.org/current.dtl
Special Issue - Natural Hazards
[New issue; No relevant content identified]

Science Translational Medicine
13 July 2016 Vol 8, Issue 347
http://stm.sciencemag.org/
Editorial
Moving at the speed of science: Regulatory flexibility for unmet medical needs
By Mikael Dolsten
Science Translational Medicine13 Jul 2016 : 347ed10
Biomedical science stops for no one, and the regulatory process must continue to keep up.

Editor's Choice
Zika meets its match
By Alex K. Shalek
Science Translational Medicine13 Jul 2016 : 347ec112
Both DNA and inactivated virus vaccines against Zika afford full, antibody-mediated protection in murine models.

Social Science & Medicine
Volume 158, Pages 1-172 (June 2016)
http://www.sciencedirect.com/science/journal/02779536/156
[Reviewed earlier]

Tropical Medicine & International Health
July 2016 Volume 21, Issue 7 Pages 819–935
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-6/issuetoc
[Reviewed earlier]

Vaccine
Volume 34, Issue 33, Pages 3711-3920 (19 July 2016)
http://www.sciencedirect.com/science/journal/0264410X/34/33
Commentary
Considerations for the development of Zika virus vaccines
Pages 3711-3712
K.A.O. Martins, J.M. Dye, S. Bavari
1. Introduction

The current Zika virus outbreak has galvanized the public health community, resulting in calls for rapid action from entities including the World Health Organization and the United States government. The response to Zika virus is perhaps the first of its kind, and it has been influenced by the lessons learned from the response to the 2014 Ebola virus outbreak in West Africa. However, Zika virus is not Ebola virus. Prior to 2016, there were only 133 publications on "Zika" in the PubMed database, and a large number of these publications were commentaries or reviews lacking primary research data. In contrast, work had been underway for decades on the development of an Ebola virus vaccine, laying the groundwork for an expedited response in 2014. The broader research community's extensive experience with dengue virus vaccine development and with the pros and cons of different vaccine platforms has led to speculation that a Zika virus vaccine can be accelerated, potentially with clinical trials initiating by the end of 2016 [1]. However, there are unique attributes of Zika virus, as well as many unanswered questions about the virus, that will need to be considered before a potential vaccine is administered to the public.

The close phylogenetic relationship between the flaviviruses has complicated diagnostic efforts for multiple members of this family, because antibody elicited by the viruses is cross-reactive [2]. Definitive diagnosis of Zika virus infection in individuals with previous flavivirus infection therefore requires detection of viral RNA by PCR, which is only achievable during approximately a two week window early in infection. Efforts are underway to develop serological assays to differentiate the flavivirus infections, which would significantly advance our understanding of the epidemiology of Zika virus. However, the cross-reactivity of antibody elicited by other flaviviruses with Zika virus may be more than a diagnostic inconvenience. Cross-reactivity will need to be considered in the context of the efficacy of potential vaccine candidates in the at-risk population…

Conference report

The Cape Town Declaration on Vaccines 2012: Unlocking the full potential of vaccines in Africa

Pages 3713-3714

Charles S. Wiysonge, Zainab Waggie, Anthony Hawkridge, Barry D. Schoub, Shabir A. Madhi, Helen Rees, Gregory D. Hussey, on behalf of delegates of the first International African Vaccinology Conference

Abstract

Delegates at the first International African Vaccinology Conference noted, with dismay, that many African children have limited access to existing and new vaccines as a consequence of weak immunisation programmes, lack of political will, and high vaccine prices. This inequality is a denial of the African child her basic right to a healthy life, and jeopardises long term economic growth on the continent. In addition, there is insufficient emphasis in Africa on adolescent and adult immunisation. The delegates documented various concerns and made various commitments; contained in this Cape Town Declaration on Vaccines, adopted on 11 November 2012. Finally, delegates confirmed their agreement with the goals and strategic objectives of the Global Vaccine Action Plan, and committed to hold African leaders accountable for its implementation during the Decade of Vaccines. The full list of registered conference delegates is provided as supplementary data to this manuscript.

Original Research Article

The effect of mass vaccination campaigns against polio on the utilization of routine immunization services: A regression discontinuity design

Pages 3817-3822
Stephane Helleringer, Patrick O. Asuming, Jalaa Abdelwahab
Abstract
Background
In most low and middle-income countries (LMIC), vaccines are primarily distributed by routine immunization services (RI) at health facilities. Additional opportunities for vaccination are also provided through mass vaccination campaigns, conducted periodically as part of disease-specific initiatives. It is unclear whether these campaigns are detrimental to RI services, or wether they may stimulate the utilization of RI.
Methods
Unobserved confounders and reverse causality have limited existing evaluations of the effects of mass vaccination campaigns on RI services. We explored the use of a regression discontinuity design (RDD) to measure these effects more precisely. This is a quasi-experimental method, which exploits random variations in birth dates to identify the causal effects of vaccination campaigns. We applied RDD to survey data on a nationwide vaccination campaign against Polio conducted in Bangladesh.
Results
We compared systematically the children born immediately before vs. after the vaccination campaign. These two groups had similar background characteristics, but differed by their exposure to the vaccination campaign. Contrary to previous studies, exposure to the campaign had positive effects on RI utilization. Children exposed to the campaign received between 0.296 and 0.469 additional doses of DPT vaccine by age 4 months than unexposed children.
Conclusions
RDD constitutes a promising tool to assess the effects of mass vaccination campaigns on RI services. It could be tested in additional settings, using larger and more precise datasets. It could also be extended to measure the effects of other disease-specific interventions on the functioning of health systems, in particular those that occur at a discrete point in time and/or include age-related eligibility criteria.

Perceptions of oral cholera vaccine and reasons for full, partial and non-acceptance during a humanitarian crisis in South Sudan

Original Research Article
Pages 3823-3827
Dorothy Peprah, Jennifer J. Palmer, G. James Rubin, Abdinasir Abubakar, Alejandro Costa, Stephen Martin, William Perea, Heidi J. Larson
Abstract
Oral cholera vaccination (OCV) campaigns were conducted from February to April 2014 among internally displaced persons (IDPs) in the midst of a humanitarian crisis in Juba, South Sudan. IDPs were predominantly members of the Nuer ethnic group who had taken refuge in United Nations bases following the eruption of violence in December 2013. The OCV campaigns, which were conducted by United Nations and non-governmental organizations (NGOs) at the request of the Ministry of Health, reached an estimated 85–96% of the target population. As no previous studies on OCV acceptance have been conducted in the context of an on-going humanitarian crisis, semi-structured interviews were completed with 49 IDPs in the months after the campaigns to better understand perceptions of cholera and reasons for full, partial or non-acceptance of the OCV. Heightened fears of disease and political danger contributed to camp residents' perception of cholera as a serious illness and increased trust in United Nations and NGOs providing the vaccine to IDPs. Reasons for partial and non-acceptance of the

vaccination included lack of time and fear of side effects, similar to reasons found in OCV campaigns in non-crisis settings. In addition, distrust in national institutions in a context of fears of ethnic persecution was an important reason for hesitancy and refusal. Other reasons included fear of taking the vaccine alongside other medication or with alcohol. The findings highlight the importance of considering the target populations' perceptions of institutions in the delivery of OCV interventions in humanitarian contexts. They also suggest a need for better communication about the vaccine, its side effects and interactions with other substances.

Revaccination with 23-valent pneumococcal polysaccharide vaccine in the Japanese elderly is well tolerated and elicits immune responses

Original Research Article

Pages 3875-3881

Kenji Kawakami, Hiroyuki Kishino, Shinichi Kanazu, Nobuhito Toshimizu, Kenichi Takahashi, Tina Sterling, Meihua Wang, Luwy Musey

Abstract

Background

Following primary vaccination of adults ⩾65 years of age with 23-valent pneumococcal polysaccharide vaccine (PPSV23), immune responses increase and thereafter appear to decrease over time. With increased life expectancy worldwide, revaccination with PPSV23 may be required for continued protection of the elderly population against pneumococcal disease. The present study evaluated the immunogenicity and safety of revaccination with PPSV23 in the Japanese elderly.

Methods

Depending on prior history of PPSV23 vaccination, adults aged ⩾70 years were given a first dose (primary group; N = 81) or second dose (revaccination group; N = 161, at least 5 years after first dose) of PPSV23 intramuscularly. Subjects were matched for gender, age, and number and type of comorbidity across both groups. Blood samples were collected before and 4 weeks postvaccination to measure serotype-specific immunoglobulin G (IgG) concentrations and opsonophagocytic killing activity (OPA) antibody titers to serotypes included in the vaccine. Injection-site and systemic adverse events (AEs) were collected for 14 days postvaccination.

Results

Baseline serotype-specific IgG geometric mean concentrations (GMCs) and OPA geometric mean titers (GMTs) were generally higher in subjects with a prior history of PPSV23 vaccination than in PPSV23-naïve subjects. The levels of IgG GMCs and OPA GMTs after revaccination were generally comparable to those observed after primary vaccination. Incidences of systemic AEs were comparable between the 2 groups. Although incidences of injection-site AEs were higher following revaccination than primary vaccination, the difference was not clinically significant as most AEs were mild to moderate in intensity and resolved within 5 days after revaccination without treatment.

Conclusion

Revaccination with PPSV23 was well tolerated and associated with increases in serotype-specific IgG concentrations and OPA titers in the elderly who received a prior PPSV23 dose at least 5 years before. Revaccination with PPSV23 can be safely implemented in the elderly for continued prevention against pneumococcal disease.

Clinical trial registry number: NCT02260882

Vaccine: Development and Therapy

https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 16 July 2016)
[No new content]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 16 July 2016)
[No new content]

Value in Health
June 2016 Volume 19, Issue 4, p297-510
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

* * * *

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

No new content identified.

* * * *

Media/Policy Watch

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

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

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 16 July 2016
Fighting Zika Without Additional Funding
Public-health officials are strategizing how to combat the virus with no new money on the horizon—and Congress away for the summer.
Nora Kelly
Zika is here. But Congress is gone.

Lawmakers adjourned this week for a seven-week summer recess without passing additional money to fight the Zika virus. Now, federal public-health officials are weighing how to stop the spread of infections with no new money coming down the pipeline—and with further budget battles near-guaranteed in the fall. "We will do the best we can to protect Americans," said Tom Frieden, the Centers for Disease Control and Prevention director. But "there are projects that will not happen because the funding isn't available."…

BBC
http://www.bbc.co.uk/
Accessed 16 July 2016
16 Jul 2016
BBC Trending: India's 'Anti-Vaccine Mafia'
[Audio]
…A Facebook post lamenting the death of teenage boy in India – from diphtheria – has shone a light on an anti-vaccination movement that appears to be gaining ground.
Published Date
BBC World Service

13 Jul 2016
Meningitis B vaccine extension rejected
Health campaigners say they are "hugely dismayed" that the meningitis B vaccine will not be extended to all children in the UK under the age of two.
It was introduced across the UK last year for babies aged up to 12 months.
But experts from the Joint Committee on Vaccination and Immunisation (JCVI) said there was not enough of the vaccine for a catch-up programme.
A petition calling for older children to be vaccinated was signed by more than 800,000 people earlier this year…

The Economist
http://www.economist.com/
Accessed 16 July 2016
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
Accessed 16 July 2016
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 16 July 2016
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 16 July 2016
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 16 July 2016
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 16 July 2016
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 16 July 2016
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 16 July 2016

Suspected Congo Yellow Fever Cases Up 38 Percent in Last Three Weeks: WHO

KINSHASA — The number of suspected yellow fever cases in the Democratic Republic of Congo has jumped 38 percent in the last three weeks, the World Health Organization (WHO) said on Friday, as health officials prepare to launch a vaccination campaign next week.

Congo's government last month declared a yellow fever epidemic in the capital Kinshasa and two provinces that border Angola, where the worst outbreak of the disease in decades has killed about 350 people.

As of July 11, Congo had recorded 1,798 suspected cases since the start of the outbreak in January, WHO said in a weekly report, up from 1,307 on June 24. Seventy-five people are believed to have died from the disease in Congo, it said.
July 15, 2016 - By REUTERS -

Congress Takes a Vacation Without Doing Anything About Zika
Opinion by THE EDITORIAL BOARD

Members of Congress are leaving Washington for seven weeks without passing a bill to pay for the fight against Zika. Their failure to do so will delay the public health response to the mosquito-borne virus that causes birth defects, unnecessarily putting thousands of people at risk.

As of July 7, 649 pregnant women appeared to be infected with Zika in American states and territories and nine babies had been born with birth defects linked to the virus. Public health experts believe that these numbers are likely to increase in the coming weeks as mosquitoes become more prevalent, especially in Florida, Hawaii and Texas. This calls for swift action by the government, but instead, the Republicans who control Congress are trying to exploit the crisis to advance ideological causes…
July 15, 2016

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 16 July 2016

[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 16 July 2016
[No new, unique, relevant content]

Think Tanks et al

Brookings
http://www.brookings.edu/
Accessed 16 July 2016
[No new relevant content]

Center for Global Development [to 16 July 2016]
http://www.cgdev.org/page/press-center
7/14/16
Estimating the Avertable Disease Burden and Cost-Effectiveness in Millions Saved Third Edition - Working Paper 429
Andrew Mirelman , Amanda Glassman and Miriam Temin
Millions Saved (2016) is a new edition of detailed case studies on the attributable impact of global health programs at scale.
[See Research above for more detail]

Council on Foreign Relations
http://www.cfr.org/
Accessed 16 July 2016
[No new relevant content]

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CVEP is a program of the GE2P2 Global Foundation – whose mission is to advance ethical and scientific rigor in research and evidence generation for governance, policy and practice in health, human rights action, humanitarian response, heritage stewardship, education and sustainable development – serving governments, international agencies, INGOs, civil society organizations (CSOs), commercial entities, consortia and alliances. CVEP maintains an academic affiliation with the Division of Medical Ethics, NYU School of Medicine, and an operating affiliation with the Vaccine Education Center of Children's Hospital of Philadelphia [CHOP].

Support for this service is provided by the Bill & Melinda Gates Foundation; PATH; the International Vaccine Institute (IVI); and industry resource members Crucell/Janssen/J&J,

Pfizer, Sanofi Pasteur U.S.,Takeda, Valera (list in formation), and the Developing Countries Vaccine Manufacturers Network (DCVMN).

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