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

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

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

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***Request an email version:** Vaccines and Global Health: The Week in Review is published as a single email summary, scheduled for release each Saturday evening before midnight (EDT in the U.S.). If you would like to receive the email version, please send your request to david.r.curry@centerforvaccineethicsandpolicy.org.*

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

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EBOLA/EVD **[**to 10 October 2015]
Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

Ebola Situation Report - 30 September 2015

[Excerpts]
SUMMARY *[excerpt]*
No confirmed cases of Ebola virus disease (EVD) were reported in the week to 4 October. This is the first time that a complete epidemiological week has elapsed with zero confirmed cases since March 2014. All contacts have now completed follow-up in Sierra Leone. However, over 500 contacts remain under follow-up in Guinea, and several high-risk contacts associated with active and recently active chains of transmission in Guinea and Sierra Leone have been lost to follow-up. There remains a near-term risk of further cases…

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Statement on the 7th meeting of the IHR Emergency Committee regarding the Ebola outbreak in West Africa
WHO statement
5 October 2015
The 7th meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (IHR) (2005) regarding the Ebola virus disease (EVD) outbreak in West Africa took place by teleconference on Thursday, 1 October 2015, and by electronic correspondence from 1-3 October 2015.

As in previous meetings, the Committee's role was to advise the WHO Director-General as to:
:: whether the event continues to constitute a Public Health Emergency of International Concern (PHEIC) and, if so,
:: whether the current temporary recommendations should be extended or revised, and whether new temporary recommendations should be issued.

Presentations were made by representatives of Guinea, Liberia and Sierra Leone on the current epidemiological situation in those countries, response operations and exit screening.

Since the 6th meeting of the Committee, Liberia has been declared free of EVD transmission for a second time (3 September 2015), the overall case incidence in Guinea and Sierra Leone has been below 10 cases per week, and the Sierra Leonean capital city of Freetown has remained free of EVD transmission for over 42 days. The Committee noted the enhanced Ebola control measures being implemented in each country and reaffirmed the importance of the community outreach, social mobilization, and other best practices.

However, 2 active chains of EVD transmission continue, one in Guinea and one in Sierra Leone. The Committee highlighted that the continued identification (including post-mortem) of cases not previously registered as contacts, resistance to response operations in some areas, and the ongoing movement of cases and contacts to Ebola-free areas, all constitute risks to stopping all EVD transmission in the subregion. The Committee noted the small number of Ebola cases in which virus from a convalescent individual could not be ruled out as the origin of infection; while viral persistence is understood to be time-limited, further investigation is needed on the nature, duration and implications of such persistence.

The Committee was concerned that although some improvements have been observed in the rescinding of excessive or inappropriate travel and transport measures, 34 countries continue to enact measures that are disproportionate to the

risks posed, and which negatively impact response and recovery efforts. Furthermore, a number of international airlines have yet to resume flights to the affected countries.

The Committee advised that the EVD outbreak continues to constitute a Public Health Emergency of International Concern. In addition, the Committee advised the Director-General to consider the following temporary recommendations, which supersede and replace those issued previously…

…Based on this advice and information, the Director-General declared that the 2014-2015 Ebola outbreak in these West African countries continues to constitute a Public Health Emergency of International Concern. The Director-General endorsed the Committee's advice and issued that advice as Temporary Recommendations under the IHR. These Temporary Recommendations supersede and replace all previous recommendations issued under the IHR in the context of the Ebola Outbreak in West Africa.

The Director-General thanked the Committee members and advisors for their advice and requested their reassessment of this situation within 3 months should circumstances require.

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Johnson & Johnson Announces Start of Clinical Trial of Ebola Vaccine Regimen in Sierra Leone

:: *First study of Janssen's prime-boost vaccine regimen in an Ebola outbreak country*
:: *Study being initiated on parallel track with multiple ongoing Phase I and II studies across U.S., Europe and Africa as part of accelerated development plan for vaccine regimen*
:: *Milestone reached just one year after Johnson & Johnson announced expanded commitment to combating Ebola*

NEW BRUNSWICK, N.J., Oct. 9, 2015 /PRNewswire/ -- Johnson & Johnson (NYSE: JNJ) today announced the start of a safety and immunogenicity clinical trial in Sierra Leone of a preventive Ebola vaccine regimen in development at its Janssen Pharmaceutical Companies. Trial recruitment is underway, and the first volunteers have received their initial vaccine dose. This is the first study conducted of Janssen's Ebola prime-boost vaccine regimen in a West African country affected by the recent Ebola epidemic.

The new study, EBOVAC-Salone, will take place in Sierra Leone's Kambia district, where some of the country's most recent Ebola cases have been reported. The regimen being tested uses a combination of two vaccine components based on AdVac® technology from Crucell Holland B.V., one of the Janssen Pharmaceutical Companies, and MVA-BN® technology from Bavarian Nordic. Volunteers in the study will first be given the AdVac dose to prime their immune system, and then the MVA-BN dose two months later to boost their immune response, with the goal of potentially strengthening and optimizing the duration of the immunity…

…Since announcing its commitment to combat Ebola in October 2014, Johnson & Johnson has mobilized significant resources to advance the research and development of an Ebola vaccine regimen with the goal of addressing the urgent public health need of affected countries such as Sierra Leone. With this goal in mind, in 2015 Janssen developed partnerships and consortia with

other companies and research institutions, secured funding from European and U.S. public authorities, and launched multiple Phase I and II studies in rapid succession across the U.S., Europe and Africa. Additionally, Janssen in partnership with Bavarian Nordic, rapidly scaled up production of the vaccine regimen to more than 800,000 regimens, with the capacity to produce a total of 2 million regimens as needed.

Professor Peter Piot, M.D., Director of the London School of Hygiene & Tropical Medicine, which is one of the partners conducting the study, said: "We cannot afford to be complacent about Ebola. We urgently need a vaccine that offers long-term protection of the population, including health workers and other care givers, in order to prevent a resurgence of the virus. To achieve this goal, it is vital to test a range of vaccine candidates, particularly in the areas affected by the epidemic where we are still seeing new cases emerging, and there is evidence that the infection may have longer-term effects among survivors. Prime-boost vaccination is an effective strategy for long-term prevention of several infectious diseases, and we believe it may have a key role to play in the fight against Ebola."

The EBOVAC-Salone study is notable in that it will evaluate the vaccine regimen's safety and immune response within the general population of Sierra Leone, including vulnerable groups such as adolescents, children, and people with HIV. In addition to the London School of Hygiene & Tropical Medicine which is coordinating the EBOVAC-Salone trial, Janssen is partnering with Sierra Leone's Ministry of Health and Sanitation, the College of Medicine and Allied Health Sciences, and two consortia of which Janssen is a member that are funded by Europe's Innovative Medicines Initiative (IMI): EBOVAC1 (Ebola Vaccine Development), which is conducting the study, and EBODAC (Ebola Vaccine Deployment, Acceptance & Compliance), which is developing a communication strategy and tools to promote the acceptance and uptake of the Ebola vaccine regimen.

From the outset, the EBOVAC-Salone team's goal has been to conduct a study that meets Sierra Leone's Ebola prevention needs, has the support of the Sierra Leonean people, and can play a sustaining role in helping to restore the country's health infrastructure following the Ebola outbreak. Significant investment has been made to build new facilities in Kambia to conduct the study, which will contribute substantially to the strengthening of the local health system. These include establishing the first Emergency Room at the Kambia District Hospital, and building a new vaccine storage facility on the hospital site. These efforts are complemented by the employment and training of doctors, nurses and other frontline health care workers who will gain valuable experience while contributing to the clinical study…

…The EBOVAC-Salone study is being initiated on a parallel track with multiple ongoing Phase I and II studies that are being conducted across the U.S., Europe and Africa as part of the accelerated development plan for the Ebola vaccine regimen. First-in-human Phase I clinical studies of the prime-boost vaccine regimen began in the United Kingdom and United States in January 2015, followed by several sites in Africa. In May 2015, Johnson & Johnson presented promising preliminary data from the UK Phase I study to the U.S. Food and Drug Administration (FDA). A Phase II study, being carried out in the UK and France, started in July 2015, and a second multi-site Phase II study will shortly commence in several West and East African countries in outside epidemic areas. These Phase II studies are being coordinated by Institut National de la Sante et de la Recherche Medicale (Inserm), another consortium partner with Janssen.

To date, there is no licensed vaccine, treatment or cure for the Ebola virus….

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Ebola nurse Pauline Cafferkey 'in serious condition'
9 October 2015
BBC
A Scottish nurse who contracted Ebola in Sierra Leone last year is in a "serious condition" after being readmitted to an isolation unit in London.
NHS Greater Glasgow and Clyde confirmed that the virus is still present in Pauline Cafferkey's body after being left over from the original infection.
She is not thought to be contagious.
The 39-year-old has been flown back to the isolation unit at the Royal Free Hospital in London.
Bodily tissues can harbour the Ebola infection months after the person appears to have fully recovered.
Ms Cafferkey, from Cambuslang in South Lanarkshire, spent almost a month in the unit at the beginning of the year after contracting the virus in December 2014…

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See additional important content on Ebola/EVD in Lancet Infectious Diseases in the Journal Watch below.

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POLIO [to 10 October 2015]
Public Health Emergency of International Concern (PHEIC)

GPEI Update: Polio this week
Global Polio Eradication Initiative
[No update for 7 October identified on GPEI website]

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UNICEF and WHO ready to support immediate polio vaccination campaign in Ukraine
UN agencies concerned further delay puts 1.8 million children's lives at risk
Joint press release
KYIV, Ukraine/COPENHAGEN/GENEVA, 9 October 2015 – Six weeks after the polio outbreak in Ukraine, UNICEF and WHO have stepped up calls for an immediate first round of nationwide polio vaccination.

Ukraine's Ministry of Health confirmed two cases of polio on 1 September. They were found in children living in Zakarpatska region, in southwest Ukraine. Both children, aged 10 months and 4 years, were not vaccinated against the disease.

If not stopped immediately, the virus can spread across Ukraine, putting 1.8 million children's lives at risk. Risk of further polio outbreak remains unless a full-scale immunization campaign begins immediately to stop the transmission of the polio virus.

International guidelines state that just one polio case constitutes an outbreak, requiring an urgent response because of how quickly polio can spread if all children are not fully immunized. The outbreak and low level of vaccination rates in Ukraine risks children's health and well-being as well as threatens Europe's polio-free status.

The outbreak can be rapidly stopped through nationwide immunization of children with three rounds of oral polio vaccines, according to guidelines from the Global Polio Eradication Initiative*, which brings together WHO, UNICEF and other health partners. UNICEF has procured 3.7 million oral polio vaccines for Ukraine, with funding from the Government of Canada. WHO has confirmed that the vaccines are entirely safe and ready to use.

"The longer the polio virus is allowed to circulate in Ukraine, the higher the risk that this outbreak will spread and paralyse more children. We call on decision-makers and health care providers in Ukraine to take immediate action and vaccinate all children to urgently stop the transmission of the virus," said Zsuzsanna Jakab, WHO Regional Director for Europe.

This is the first polio outbreak to hit Ukraine in 19 years, revealing the vulnerability of children in the country. These two cases highlight once again the importance of full vaccination coverage for all children.

"Government authorities have the responsibility to protect children against this debilitating disease. I am pleased that today 70 per cent of Ukrainian mothers are aware of the benefits of vaccination to protect their children. Vaccination rounds should start now," said Marie-Pierre Poirier, UNICEF Regional Director.

Ukraine's political leaders must take the decision to support the outbreak response measures and launch the nationwide immunization campaign to protect children from avoidable paralysis and possible death.

UNICEF and WHO are on standby to support the campaign.

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See additional important content on polio in Lancet Infectious Diseases in the Journal Watch below.

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MERS-CoV [to 10 October 2015]
Global Alert and Response (GAR) – Disease Outbreak News (DONs)
]No new updates identified; last update:
1 October 2015 - Middle East respiratory syndrome coronavirus (MERS-CoV) – Jordan]

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WHO & Regionals [to 10 October 2015]

WHO Welcomes Nobel Prize for Medicine Awards for Discoveries of Tropical Disease Drugs

October 2015 -- WHO welcomes the decision to award the Nobel Prize for Medicine for the discovery of drugs that have radically improved treatment for tropical diseases such as Malaria, onchocerciasis (River Blindness), and lymphatic filariasis.

The **Weekly Epidemiological Record (WER) 9 October 2015, vol. 90, 41 (pp. 545–560)** includes:
545 Recommended composition of influenza virus vaccines for use in the 2016 southern hemisphere influenza season
559 Monthly report on dracunculiasis cases, January-July 2015

Call for nominations for experts to serve on a SAGE Working Group on Oral Cholera Vaccines
WHO -2 October 2015
Application deadline: 30 October 2015

World Mental Health Day 2015
Dignity in mental health

:: WHO Regional Offices

WHO African Region AFRO
:: Dr Moeti - Health is a reliable measure of progress towards the Sustainable Development Goals

Cape Town, 6 October 2015 - The WHO Regional Director for Africa, Dr Matshidiso Moeti has underscored the critical role of health in achieving the Sustainable Development Goals (SDGs). Addressing delegates at the Second Ministerial Forum on China-Africa Health Development, in Cape Town, South Africa, Dr Moeti observed that although health is a desirable outcome of the SDGs in its own right and an input into other goals, it is a reliable measure of sustainable development. She noted that health can no longer be considered as a consuming sector…

WHO Region of the Americas PAHO
:: Breast cancer awareness, screening and treatment save lives, PAHO experts say (10/06/2015)

WHO South-East Asia Region SEARO
:: Dignity in mental health - 10 October 2015
:: Ensure eye care for all - 08 October 2015

WHO European Region EURO

:: UNICEF and WHO ready to support immediate polio vaccination campaign in Ukraine 09-10-2015
:: Food, water and health care: WHO reviews basic services for refugees crossing Serbia 09-10-2015
:: New WHO guidelines on antiretroviral therapy and pre-exposure prophylaxis for HIV infection 07-10-2015
:: Medical professionals trained in refugee and migrant health in the former Yugoslav Republic of Macedonia 05-10-2015

WHO Eastern Mediterranean Region EMRO
:: 62nd session of the WHO Regional Committee concludes in Kuwait
9 October 2015 – The WHO Regional Committee for the Eastern Mediterranean concluded its 62nd session on 8 October with the adoption of important resolutions and decisions to advance the health agenda in the Region. Resolutions outline the joint work expected from Member States and WHO in the areas of health security, prevention and control of emerging infections, prevention of cardiovascular diseases, diabetes, and cancer, medical education, mental health, and assessment and monitoring of the implementation of the IHR 2005, among others.
:: Scaling up response to the cholera outbreak in Iraq - 8 October 2015
:: WHO delivers additional medical supplies to Yemen - 8 October 2015

WHO Western Pacific Region
No new digest content identified.

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CDC/MMWR/ACIP Watch [to 10 October 2015]
http://www.cdc.gov/media/index.html

MMWR October 9, 2015 / No. 39/ Vol. 64
:: Update: Shortened Interval for Postvaccination Serologic Testing of Infants Born to Hepatitis B-Infected Mothers
:: *Notes from the Field*: Measles in a Patient with Presumed Immunity — Los Angeles County, 2015

ACIP Meeting – October 21, 2015 [one-day meeting]
October 21, 2015[2 pages] Final, October 8, 2015

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Initiatives/Announcements/Milestones

2015 Nobel Prize in Physiology or Medicine
The Nobel Prize in Physiology or Medicine 2015 was awarded with one half jointly to William C. Campbell and Satoshi Ōmura for their discoveries concerning a novel therapy against infections

caused by roundworm parasites and the other half to Youyou Tu for her discoveries concerning a novel therapy against Malaria.

Diseases caused by parasites have plagued humankind for millennia and constitute a major global health problem. In particular, parasitic diseases affect the world's poorest populations and represent a huge barrier to improving human health and wellbeing. This year's Nobel Laureates have developed therapies that have revolutionized the treatment of some of the most devastating parasitic diseases.

William C. Campbell and Satoshi Ōmura discovered a new drug, Avermectin, the derivatives of which have radically lowered the incidence of River Blindness and Lymphatic Filariasis, as well as showing efficacy against an expanding number of other parasitic diseases. Youyou Tu discovered Artemisinin, a drug that has significantly reduced the mortality rates for patients suffering from Malaria.

These two discoveries have provided humankind with powerful new means to combat these debilitating diseases that affect hundreds of millions of people annually. The consequences in terms of improved human health and reduced suffering are immeasurable.

Parasites cause devastating diseases
We live in a biologically complex world, which is populated not only by humans and other large animals, but also by a plethora of other organisms, some of which are harmful or deadly to us. A variety of parasites cause disease. A medically important group are the parasitic worms (helminths), which are estimated to afflict one third of the world's population and are particularly prevalent in sub-Saharan Africa, South Asia and Central and South America. River Blindness and Lymphatic Filariasis are two diseases caused by parasitic worms. As the name implies, River Blindness (Onchocerciasis) ultimately leads to blindness, because of chronic inflammation in the cornea. Lymphatic Filariasis, afflicting more than 100 million people, causes chronic swelling and leads to life-long stigmatizing and disabling clinical symptoms, including Elephantiasis (Lymphedema) and Scrotal Hydrocele.

Malaria has been with humankind for as long as we know. It is a mosquito-borne disease caused by single-cell parasites, which invade red blood cells, causing fever, and in severe cases brain damage and death. More than 3.4 billion of the world's most vulnerable citizens are at risk of contracting Malaria, and each year it claims more than 450 000 lives, predominantly among children.

After decades of limited progress in developing durable therapies for parasitic diseases, the discoveries by this year's Laureates radically changed the situation…
Read more

Wellcome Trust reaction to Nobel Prize in Physiology or Medicine 2015

5 October 2015
Wellcome Trust Director Jeremy Farrar has issued the below statement in reaction today's announcement that the Nobel Prize in Physiology or Medicine has been awarded for groundbreaking work on parasitic diseases:

The 2015 prize is shared between William C Campbell and Satoshi Omura for their work on a new way of tackling infections caused by roundworm parasites; and Tu Youyou for her role in the discovery of a therapy against malaria.

Dr Jeremy Farrar, Director of the Wellcome Trust, said: "I am delighted that the development of drugs to tackle parasitic infectious diseases has been recognised. Today's Nobel Prize rightly highlights the impact of studying the neglected tropical diseases that kill millions worldwide – the discovery of artemisinin and avermectins has transformed the treatment of malaria, river blindness and lymphatic filariasis.

"The restrictions of the Prize, however, mean that other Chinese scientists who played a critical role in the discovery of artemisinin are unfortunately not acknowledged alongside Dr Tu Youyou. The pivotal role they played in China's first Nobel Prize for medicine should be honoured and celebrated. We should also remember those whose work ensured it was developed as a medicine and then used worldwide. Scientific endeavour is increasingly a collaborative and global effort that involves great contributions from many individuals."

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Gavi [to 10 October 2015]
http://www.gavialliance.org/library/news/press-releases/
New commitment from the Republic of Korea to Gavi will support childhood immunisation in the world's poorest countries
Korean support for immunisation in developing countries now stands at US$ 15 million.
Geneva, 6 October 2015 – The Republic of Korea today signed a new agreement with Gavi, the Vaccine Alliance to increase its contribution towards childhood immunisation in developing countries between 2015 and 2017. Under the terms of the agreement, Korea will provide an additional US$ 3 million per year.
The agreement – signed this afternoon by Mr Lee Yongsoo, Director-General for Development Cooperation, Ministry of Foreign Affairs of Korea and Gavi CEO Dr Seth Berkley – marks the third time Korea has committed support for Gavi.

Make vaccine coverage a key UN health indicator
Track progress towards universal care using a wide-reaching intervention that all countries can readily measure, says Seth Berkley.
06 October 2015
Nature 526, 165 (08 October 2015) doi:10.1038/526165a

At the United Nations meeting in New York late last month, attendees started to refer to the new Sustainable Development Goals by a different name. The aims morphed into the Global Goals for sustainable development, or just Global Goals.

Whatever we call them, if the goals are to achieve what they set out to, the next few weeks will be crucial. At the end of this month, a UN expert group will meet to try to agree on how to measure progress — and success or failure.

Each of the 17 goals is made up of several targets — 169 in all. Global Goal 3, for example — to "ensure healthy lives and promote well-being for all at all ages" — includes a target to achieve universal health coverage (UHC). UHC is something that the World Health Organization has been pushing for since 2005, asking all countries to provide comprehensive health care for all citizens at an affordable cost.

The UN is exploring having each of these 169 targets judged against two 'indicators'. But what can best indicate UHC? Unlike the Millennium Development Goals (MDGs) that preceded them, the Global Goals focus on both rich and poor countries. 'Universal' really must mean everyone.

One way to indicate progress towards UHC is to measure access to health interventions. But which treatments should we choose? Shine the spotlight on one and another is cast into the shadows. And how important is it for everyone to have access to the same treatments anyway? A child with type 1 diabetes growing up in Kansas clearly does not need the same access to mosquito nets as a child living in Somalia. And should we judge the health of the Somalian child on the basis of their access to blood-glucose monitoring?

Given the challenge of trying to capture this complexity in a single measure, the UN is exploring having an indicator for UHC that is broken down into sub-indicators, which it calls tracers. Possible tracers include access to treatments for tuberculosis, hypertension and diabetes, as well as access to antiretroviral therapy and preventative measures for neglected tropical diseases. Others include improved sanitation, having a skilled attendant present during births, provision of insecticide-treated bed nets and access to full childhood immunization. In some countries, the list could extend to mental-health provision, treatment for cataracts, palliative care and other interventions.

At first glance, the list looks balanced. It reflects a good cross-section of disease burden, and each tracer can be monitored with relative ease using existing data sources such as health records or ones that can be readily set up, including household surveys. But does the list ensure the true health of a population?

Even if all countries made all these interventions available, it would not necessarily mean that people were healthier. The fact that someone is in need of care suggests that they are not healthy, possibly because the system has in some way failed to prevent an illness.

With so many Global Goal targets — the eight MDGs had just 21 — there has been pressure on the UN to reduce the number of indicators. For UHC, one indicator is likely to be concerned with 'affordability', meaning that it is possible that all the chosen interventions, including those mentioned above, will be bundled into a single indicator.

This is a difficult problem. Even the common definition of 'health' as a state free from injury or disease is disputed by some. So it is no surprise that measuring health is fraught with problems. In trying to encompass this complexity, the UN risks creating an indicator that merely measures service coverage of a few selected therapeutic interventions.

Universal coverage is a means towards better health, but is not an end in itself. We should not be measuring health by access to treatments such as nicotine replacement therapy and lung

surgery. Instead, we should be looking at tobacco control and other measures aimed at reducing smoking uptake in the first place.

A true indicator of UHC should be an intervention that every country can readily measure, that speaks to equitable access and quality, and that will reliably ensure the health of a population. Immunization is such an indicator. (Some data are missing, but all countries have agreed to work towards measuring vaccination rates.)

That is why some voices, including that of my organization, Gavi, the Vaccine Alliance, are calling for the Global Goals framework to make full childhood immunization a separate ambitious indicator of UHC in its own right.

More than 30 vaccine doses are administered globally every second. No other health intervention reaches so many people, or is capable of preventing such a diverse range of public-health concerns — from virulent infectious diseases such as measles, to cervical and liver cancer. And at the same time, it helps to identify worrying trends in rich countries — such as the drop in immunizations in parts of California to levels on a par with South Sudan, which has led to outbreaks in recent years.

If immunization is not made a separate indicator, then the UN should make clear that some of the tracers on its long list — including immunization — carry more weight than others. After all, as the old adage goes, when it comes to health, an ounce of prevention is worth a pound of cure.

European Vaccine Initiative [to 10 October 2015]
http://www.euvaccine.eu/news-events
News
Two videos emerge from the SEmalvac project
05 October 2015
Media coverage in the form of two videos on YouTube dealing with Japanese efforts in the war against malaria in Burkina Faso have been produced under the SEmalvac project.

News
Results and lessons learned from TRANSVAC
05 October 2015
An article just published in Vaccine highlights the successful implementation of the TRANSVAC research infrastructure project, which was concluded in 2013. See also the TRANSVAC web site.

CBD Convention on Biological Diversity [to 10 October 2015]
http://www.cbd.int/press-releases/
The first internationally recognized certificate of compliance is issued under the Nagoya Protocol on Access and Benefit-sharing
Montreal, 7 October 2015 – The first internationally recognized certificate of compliance was issued on 1 October 2015, following a permit made available to the Access and Benefit-sharing (ABS) Clearing-House by India.

Under the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, Parties are to issue a permit or its equivalent at the time of access as evidence that access to genetic resources was based on prior informed consent and that mutually agreed terms were established. Parties are required by the Nagoya Protocol to make information on the permit or its equivalent, available to the ABS Clearing-House for the constitution of the internationally recognized certificate of compliance.

The permit was issued by India's National Biodiversity Authority, the competent national authority under the Nagoya Protocol. The certificate then constituted through the ABS Clearing-House serves as evidence of the decision by India to grant access to ethno-medicinal knowledge of the Siddi community from Gujarat to a researcher affiliated with the University of Kent in the United Kingdom. The researcher can now demonstrate that s/he has respected the ABS requirements of India when using this knowledge.

"Last week was an important week for the Nagoya Protocol," said Braulio Ferreira de Souza Dias, Executive Secretary of the Convention on Biological Diversity. "In addition to having the first internationally recognized certificate of compliance published in the ABS Clearing-House, two additional countries joined the Protocol: the Philippines and Djibouti, which brings the total number of ratifications to 68."…

Industry Watch [to 10 October 2015]

:: **Johnson & Johnson Announces Start of Clinical Trial of Ebola Vaccine Regimen in Sierra Leone**
Oct 09, 2015 *[see Ebola coverage above]*

:: **Pfizer's Phase 2 Study Demonstrates Safety, Tolerability and Immunogenicity of TRUMENBA® When Coadministered with Meningococcal A, C, Y and W-135 Polysaccharide Conjugate (MCV4) and Tetanus, Diphtheria and Pertussis (Tdap) Vaccines in Adolescents**
October 09, 2015
Pfizer Inc. (NYSE:PFE) announced today that researchers presented for the first time data from a randomized, controlled Phase 2 study…

:: **Focus on International Cooperation for Global Access to Vaccines at the DCVMN 16th Annual AGM**
October 06, 2015
Under the auspices of the Queen Saovabha Memorial Institute (QSMI) of the Thai Red Cross Society and BioNet-Asia, the 16th Annual General Meeting of the Developing Countries Vaccine Manufacturers Network…

:: **Global Pharmaceutical Associations Welcome MEDICRIME Convention, Landmark Tool to Curb Global Medicines Counterfeiting** IFPMA -
01 October 2015

:: **PhRMA Statement On the TransPacific Partnership Negotiations**
Washington, D.C. (October 5, 2015) — Pharmaceutical Research and Manufacturers of America (PhRMA) President and CEO, John Castellani, issued the following statement:

"PhRMA believes that strong intellectual property protection is necessary for the discovery and development of new treatments and therapies for the world's patients.

"We are disappointed that the Ministers failed to secure 12 years of data protection for biologic medicines, which represent the next wave of innovation in our industry. This term was not a random number, but the result of a long debate in Congress, which determined that this period of time captured the appropriate balance that stimulated research but gave access to biosimilars in a timely manner.

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Aeras [to 10 October 2015]
http://www.aeras.org/pressreleases
No new digest content identified

IAVI International AIDS Vaccine Initiative [to 10 October 2015]
http://www.iavi.org/press-releases/2015
No new digest content identified

IVI [to 10 October 2015]
http://www.ivi.org/web/www/home
No new digest content identified

PATH [to 10 October 2015]
http://www.path.org/news/index.php
No new digest content identified.

Sabin Vaccine Institute [to 10 October 2015]
http://www.sabin.org/updates/pressreleases
No new digest content identified

Global Fund [to 10 October 2015]
http://www.theglobalfund.org/en/mediacenter/newsreleases/
No new digest content identified.

BMGF - Gates Foundation [to 10 October 2015]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

NIH [to 10 October 2015]
http://www.nih.gov/news/releases.htm
No new digest content identified.

FDA [to 10 October 2015]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
No new digest content identified

European Medicines Agency [to 10 October 2015]
http://www.ema.europa.eu/ema/
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

Global Standards for quality health-care services for adolescents

WHO
2015 :: Number of pages: 40, 28, 100, 132
WHO reference number: 978 92 4 154933 2
Volume 1: Standards and criteria pdf, 918kb
Volume 2: Implementation guide pdf, 867kb
Volume 3: Tools to conduct quality and coverage measurement surveys to collect data about compliance with the global standards pdf, 887kb
Volume 4: Scoring sheets for data analysis pdf, 927kb
Policy brief pdf, 770kb

Overview

Global initiatives are urging countries to prioritize quality as a way of reinforcing human rights-based approaches to health. Yet evidence from both high- and low-income countries shows that services for adolescents are highly fragmented, poorly coordinated and uneven in quality. Pockets of excellent practice exist, but, overall, services need significant improvement and should be brought into conformity with existing guidelines.

WHO/UNAIDS Global Standards for quality health care services for adolescents aim to assist policy-makers and health service planners in improving the quality of health-care services so that adolescents find it easier to obtain the health services that they need to promote, protect and improve their health and well-being.

Press Release

WHO and UNAIDS launch new standards to improve adolescent care

GENEVA, 6 October 2015—New Global Standards for quality health-care services for adolescents developed by the World Health Organization (WHO) and UNAIDS aim to help countries improve the quality of adolescent health care.

Existing health services often fail the world's adolescents (10-19-year-olds). Many adolescents who suffer from mental health disorders, substance use, poor nutrition, intentional injuries and chronic illness do not have access to critical prevention and care services. Meanwhile, many behaviours that have a lifelong impact on health begin in adolescence.

"These standards provide simple yet powerful steps that countries – both rich and poor – can immediately take to improve the health and wellbeing of their adolescents, reflecting the stronger focus on adolescents in the new Global Strategy for Women's, Children's and Adolescents' Health that was launched in New York in September," says Dr Anthony Costello, Director of Maternal, Children's and Adolescents' Health at WHO.

Adolescents form a unique group, rapidly developing both physically and emotionally but are often dependent on their parents or guardians. WHO and UNAIDS Global Standards for quality health-care services for adolescents recommend making services more "adolescent friendly", providing free or low-cost consultations, and making medically accurate age-appropriate health information available. They also highlight the need for adolescents to be able to access services without necessarily having to make an appointment or requiring parental consent, safe in the knowledge that any consultation remains confidential, and certain that they will not experience discrimination…

…"AIDS is the leading cause of death among adolescents in Africa and the second primary cause of death among adolescents globally," says Dr Mariângela Simão, Director of Rights, Gender, Prevention and Community Mobilization at UNAIDS. "All adolescents, including key populations, have a right to the information and services that will empower them to protect themselves from HIV." …

…The Global Standards for quality health-care services for adolescents call for an inclusive package of information, counselling, diagnostic, treatment and care services that go beyond the traditional focus on sexual and reproductive health.

Adolescents should be meaningfully involved in planning, monitoring and providing feedback on health services and in decisions regarding their own care.

More than 25 low- and middle-income countries have already adopted national standards for improving adolescent health services.

The global standards from WHO and UNAIDS are built on research from these countries, as well as feedback from health providers and more than 1000 adolescents worldwide. They are accompanied by an implementation and evaluation guide that outlines concrete steps that countries can take to improve health care for adolescents.

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Journal Watch

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

specifically relevant to our work. Successful access to some of the links provided may require subscription or other access arrangement unique to the publisher.

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

The American Journal of Bioethics
Volume 15, Issue 9, 2015
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

American Journal of Infection Control
October 2015 Volume 43, Issue 10, p1027-1146, e61-e66
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
October 2015 Volume 49, Issue 4, p493-660, e23-e52
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 105, Issue S4 (October 2015)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
October 2015; 93 (4)
http://www.ajtmh.org/content/current

Economic Burden of Dengue Virus Infection at the Household Level Among Residents of Puerto Maldonado, Peru
Gabriela Salmon-Mulanovich, David L. Blazes, Andres G. Lescano, Daniel G. Bausch, Joel M. Montgomery, and William K. Pan
Am J Trop Med Hyg 2015 93:684-690; Published online July 27, 2015, doi:10.4269/ajtmh.14-0755

Detection of Chikungunya Virus in Nepal
Basu Dev Pandey, Biswas Neupane, Kishor Pandey, Mya Myat Ngwe Tun, and Kouichi Morita
Am J Trop Med Hyg 2015 93:697-700; Published online July 20, 2015, doi:10.4269/ajtmh.15-0092

Investigating Barriers to Tuberculosis Evaluation in Uganda Using Geographic Information Systems

Jennifer M. Ross, Adithya Cattamanchi, Cecily R. Miller, Andrew J. Tatem, Achilles Katamba, Priscilla Haguma, Margaret A. Handley, and J. Lucian Davis
Am J Trop Med Hyg 2015 93:733-738; Published online July 27, 2015, doi:10.4269/ajtmh.14-0754

Annals of Internal Medicine
6 October 2015, Vol. 163. No. 7
http://annals.org/issue.aspx
Original Research
Cost-Effectiveness of Herpes Zoster Vaccine for Persons Aged 50 Years
Phuc Le, PhD, MPH; and Michael B. Rothberg, MD, MPH
Abstract
Background: Each year, herpes zoster (HZ) affects 1 million U.S. adults, many of whom develop postherpetic neuralgia (PHN). Zoster vaccine is licensed for persons aged 50 years or older, but its cost-effectiveness for those aged 50 to 59 years is unknown.
Objective: To estimate the cost-effectiveness of HZ vaccine versus no vaccination.
Design: Markov model.
Data Sources: Medical literature.
Target Population: Adults aged 50 years.
Time Horizon: Lifetime.
Perspective: Societal.
Intervention: HZ vaccine.
Outcome Measures: Number of HZ and PHN cases prevented and incremental cost per quality-adjusted life-year (QALY) saved.
Results of Base-Case Analysis: For every 1000 persons receiving the vaccine at age 50 years, 25 HZ cases and 1 PHN case could be prevented. The incremental cost-effectiveness ratio (ICER) for HZ vaccine versus no vaccine was $323 456 per QALY.
Results of Sensitivity Analysis: In deterministic and scenario sensitivity analyses, the only variables that produced an ICER less than $100 000 per QALY were vaccine cost (at a value of $80) and the rate at which efficacy wanes. In probabilistic sensitivity analysis, the mean ICER was $500 754 per QALY (95% CI, $93 510 to $1 691 211 per QALY). At a willingness-to-pay threshold of $100 000 per QALY, the probability that vaccination would be cost-effective was 3%.
Limitation: Long-term effectiveness data for HZ vaccine are lacking for 50-year-old adults.
Conclusion: Herpes zoster vaccine for persons aged 50 years does not seem to represent good value according to generally accepted standards. Our findings support the decision of the Advisory Committee on Immunization Practices not to recommend the vaccine for adults in this age group.

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 10 October 2015)
Research article
Propensity to seek healthcare in different healthcare systems: analysis of patient data in 34 countries

Tessa van Loenen, Michael van den Berg, Marjan Faber, Gert Westert BMC Health Services Research 2015, 15:465 (9 October 2015)

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 10 October 2015)
Editorial
Challenges to the management of curable sexually transmitted infections
Marcus Y Chen, Sepehr N Tabrizi BMC Infectious Diseases 2015, 15:337 (1 December 2015)
Abstract
Each year, hundreds of millions of new cases of curable sexually transmitted infections (STIs) occur worldwide resulting in reproductive and other serious sequelae, as well as enhanced transmission of HIV. The clinical management and control of these STIs should include as a minimum access to services that provide timely and accurate diagnostic testing together with effective treatment. The provision of appropriate treatment is challenged by the development of increasing antimicrobial resistance, in particular with gonorrhoea and Mycoplasma genitalium infections, requiring new treatments and management algorithms. In addition, infections such as chlamydia, syphilis and trichomoniasis, which show few signs of resistance, are nevertheless highly prevalent and require better public health control measures. While these may be achievable in high income countries, they are still beyond the reach of many low and middle income countries, making substantial improvements in STI management and reductions in STI prevalence challenging.

Research article
Long-term immunogenicity and safety after a single dose of the quadrivalent meningococcal serogroups A, C, W, and Y tetanus toxoid conjugate vaccine in adolescents and adults: 5-year follow-up of an open, randomized trial
Charissa Fay Corazon Borja-Tabora, Cecilia Montalban, Ziad Memish, Dominique Boutriau, Devayani Kolhe, Jacqueline Miller, Marie Van der Wielen BMC Infectious Diseases 2015, 15:409 (6 October 2015)
Abstract
Background
Long-term protection against meningococcal disease is associated with persistence of post-vaccination antibodies at protective levels. We evaluated the bactericidal antibody persistence and safety of the quadrivalent meningococcal serogroups A, C, W and Y tetanus-toxoid conjugate vaccine (MenACWY-TT) and the meningococcal polysaccharide serogroups A, C, W, and Y vaccine (MenACWY-PS) up to 5 years post-vaccination.
Methods
This phase IIb, open, randomized, controlled study conducted in the Philippines and Saudi Arabia consisted of a vaccination phase and a long-term persistence phase. Healthy adolescents and adults aged 11–55 years were randomized (3:1) to receive a single dose of MenACWY-TT (ACWY-TT group) or MenACWY-PS (Men-PS group). Primary and persistence results up to 3 years post-vaccination have been previously reported. Antibody responses against meningococcal serogroups A, C, W, and Y were assessed by a serum bactericidal antibody assay using rabbit complement (rSBA, cut-off titers 1:8 and 1:128) at Year 4 and Year 5 post-vaccination. Vaccine-related serious adverse events (SAEs) and cases of meningococcal disease were assessed up to Year 5.

Results
Of the 500 vaccinated participants, 404 returned for the Year 5 study visit (Total Cohort Year 5). For the Total Cohort Year 5, 71.6–90.0 and 64.9–86.3 % of MenACWY-TT recipients had rSBA titers ≥1:8 and ≥1:128, respectively, compared to 24.8–74.3 and 21.0–68.6 % of MenACWY-PS recipients. The rSBA geometric mean titers (GMTs) remained above the pre-vaccination levels in both treatment groups. Exploratory analyses suggested that both rSBA GMTs as well as the percentages of participants with rSBA titers above the cut-offs were higher in the ACWY-TT than in the Men-PS group for serogroups A, W and Y, with no apparent difference for MenC. No SAEs related to vaccination or cases of meningococcal disease were reported up to Year 5.
Conclusion
These results suggest that a single dose of MenACWY-TT could protect at least 72 % of vaccinated adolescents and adults against meningococcal disease at least 5 years post-vaccination.

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 10 October 2015)
[No new relevant content identified]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 10 October 2015)
Research article
Changes in equity of maternal, newborn, and child health care practices in 115 districts of rural Ethiopia: implications for the health extension program
Ali Karim, Addis Tamire, Araya Medhanyie, Wuleta Betemariam BMC Pregnancy and Childbirth 2015, 15:238 (5 October 2015)
Abstract
Background
Reducing within-country inequities in the coverage of maternal, newborn, and child health (MNCH) interventions is essential to improving a country's maternal and child health and survival rates. The community-based health extension program (HEP) of Ethiopia, launched in 2003, aims to provide equitable primary health care services. Since 2008 the Last Ten Kilometers Project (L10K) has been supporting the HEP in promoting equitable MNCH interventions in 115 districts covering about 14 million people. We report the inequities in MNCH programmatic indicators in 2008 and in 2010 in the L10K areas, along with changes in equity between the two survey periods, and the implications of these results for the national program.
Methods
The study used cross-sectional surveys of 3932 and 3867 women from 129 representative kebeles (communities) conducted in December 2008 and December 2010, respectively. Nineteen HEP outreach activity coverage and MNCH care practice indicators were calculated for each survey period, stratified by the inequity factors considered (i.e. age, education, wealth and distance from the nearest health facility). We calculated relative inequities using concentration indices for each of the indicators and inequity factors. Ninety-five percent confidence intervals and survey design adjusted Wald's statistics were used to assess differentials in equity.

Results
Education and age related inequities in the MNCH indicators were the most prominent (observed for 13 of the 19 outcomes analyzed), followed in order by wealth inequity (observed for eight indicators), and inequity due to distance from the nearest health facility (observed for seven indicators). Age inequities in six of the indicators increased between 2008 and 2010; nevertheless, there was no consistent pattern of changes in inequities during that period. Some related issues such as inequities due to wealth in household visits by the health extension workers and prevalence of modern family household; and inequities due to education in household visits by community health promoters showed improvement.
Conclusions
Addressing these inequities in MNCH interventions by age, education and wealth will contribute significantly toward achieving Ethiopia's maternal health targets for the Millennium Development Goals and beyond. HEP will require more innovative strategies to achieve equitable MNCH services and outcomes and to routinely monitor the effectiveness of those strategies.

BMC Public Health
http://www.biomedcentral.com/bmcpublichealth/content
(Accessed 10 October 2015)
Research article
The role of men in abandonment of female genital mutilation: a systematic review
Nesrin Varol, Sabera Turkmani, Kirsten Black, John Hall, Angela Dawson BMC Public Health 2015, 15:1034 (8 October 2015)
Open Access
Abstract
Background
Men in their roles as fathers, husbands, community and religious leaders may play a pivotal part in the continuation of female genital mutilation (FGM). However, the research on their views of FGM and their potential role in its abandonment are not well described.
Methods
We undertook a systematic review of all publications between 2004 and 2014 that explored men's attitudes, beliefs, and behaviours in regards to FGM, as well as their ideas about FGM prevention and abandonment.
Results
We included twenty peer-reviewed articles from 15 countries in the analysis. Analysis revealed ambiguity of men's wishes in regards to the continuation of FGM. Many men wished to abandon this practice because of the physical and psychosexual complications to both women and men. Social obligation and the silent culture between the sexes were posited as major obstacles for change. Support for abandonment was influenced by notions of social obligation, religion, education, ethnicity, urban living, migration, and understanding of the negative sequelae of FGM. The strongest influence was education.
Conclusion
The level of education of men was one of the most important indicators for men's support for abandonment of FGM. Social obligation and the lack of dialogue between men and women were two key issues that men acknowledged as barriers to abandonment. Advocacy by men and collaboration between men and women's health and community programs may be important steps forward in the abandonment process.

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 10 October 2015)
[No new relevant content identified]

BMJ Open
2015, Volume 5, Issue 10
http://bmjopen.bmj.com/content/current
[Reviewed earlier]

British Medical Journal
10 October 2015 (vol 351, issue 8026)
http://www.bmj.com/content/351/8026
Trends in utilization of FDA expedited drug development and approval programs, 1987-2014: cohort study
BMJ 2015; 351 :h4633 (Published 23 September 2015)
Open Access
Abstract
Objective To evaluate the use of special expedited development and review pathways at the US Food and Drug Administration over the past two decades.
Design Cohort study.
Setting FDA approved novel therapeutics between 1987 and 2014.
Population Publicly available sources provided each drug's year of approval, their innovativeness (first in class versus not first in class), World Health Organization Anatomic Therapeutic Classification, and which (if any) of the FDA's four primary expedited development and review programs or designations were associated with each drug: orphan drug, fast track, accelerated approval, and priority review.
Main outcome measures Logistic regression models evaluated trends in the proportion of drugs associated with each of the four expedited development and review programs. To evaluate the number of programs associated with each approved drug over time, Poisson models were employed, with the number of programs as the dependent variable and a linear term for year of approval. The difference in trends was compared between drugs that were first in class and those that were not.
Results The FDA approved 774 drugs during the study period, with one third representing first in class agents. Priority review (43%) was the most prevalent of the four programs, with accelerated approval (9%) the least common. There was a significant increase of 2.6% per year in the number of expedited review and approval programs granted to each newly approved agent (incidence rate ratio 1.026, 95% confidence interval 1.017 to 1.035, P<0.001), and a 2.4% increase in the proportion of drugs associated with at least one such program (odds ratio 1.024, 95% confidence interval 1.006 to 1.043, P=0.009). Driving this trend was an increase in the proportion of approved, non-first in class drugs associated with at least one program for drugs (P=0.03 for interaction).
Conclusions In the past two decades, drugs newly approved by the FDA have been associated with an increasing number of expedited development or review programs. Though expedited

programs should be strictly limited to drugs providing noticeable clinical advances, this trend is being driven by drugs that are not first in class and thus potentially less innovative.

Bulletin of the World Health Organization
Volume 93, Number 10, October 2015, 665-740
http://www.who.int/bulletin/volumes/93/10/en/
[Reviewed earlier]

Clinical Infectious Diseases (CID)
Volume 61 Issue 8 October 15, 2015
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[Reviewed earlier]

Clinical Therapeutics
September 2015 Volume 37, Issue 9, p1873-2150
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Complexity
September/October 2015 Volume 21, Issue 1 Pages C1–C1, 1–386
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Conflict and Health
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Research
The influence of maternal health education on the place of delivery in conflict settings of Darfur, Sudan
Adam IF Conflict and Health 2015, 9:31 (5 October 2015)

Research
Health service resilience in Yobe state, Nigeria in the context of the Boko Haram insurgency: a systems dynamics analysis using group model building
Ager AK, Lembani M, Mohammed A, Mohammed Ashir G, Abdulwahab A, de Pinho H, Delobelle P and Zarowsky C Conflict and Health 2015, 9:30 (5 October 2015)

Contemporary Clinical Trials
Volume 44, In Progress (September 2015)
http://www.sciencedirect.com/science/journal/15517144/44
[No new relevant content]

Cost Effectiveness and Resource Allocation
http://www.resource-allocation.com/
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Current Opinion in Infectious Diseases
October 2015 - Volume 28 - Issue 5 pp: v-vi,397-496
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

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

Development in Practice
Volume 25, Issue 8, 2015
http://www.tandfonline.com/toc/cdip20/current
[New issue; No relevant content identified]

Disasters
October 2015 Volume 39, Issue 4 Pages 611–810
http://onlinelibrary.wiley.com/doi/10.1111/disa.2015.39.issue-4/issuetoc
[Reviewed earlier]

Emerging Infectious Diseases
Volume 21, Number 10—October 2015
http://wwwnc.cdc.gov/eid/
Decreased Ebola Transmission after Rapid Response to Outbreaks in Remote Areas, Liberia, 2014
PDF Version [PDF - 538 KB - 8 pages]
K. A. Lindblade et al.
Basic interventions and community acceptance can result in rapid control of outbreaks.

Epidemics
Volume 13, In Progress (December 2015)
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[Reviewed earlier]

Epidemiology and Infection

Volume 143 - Issue 14 - October 2015
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
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[Reviewed earlier]

The European Journal of Public Health
Volume 25, Issue 5, 1 October 2015
http://eurpub.oxfordjournals.org/content/25/5
[Reviewed earlier]

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Volume 20, Issue 40, 08 October 2015
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
[New issue; No relevant content identified]

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

Global Health Governance
http://blogs.shu.edu/ghg/category/complete-issues/spring-autumn-2014/
[Accessed 10 October 2015]
[No new content]

Global Public Health
Volume 10, Issue 9, 2015
http://www.tandfonline.com/toc/rgph20/current
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 10 October 2015]
[No new content]

Health Affairs
October 2015; Volume 34, Issue 10
http://content.healthaffairs.org/content/current
Global Health: Insurance
Assessing Latin America's Progress Toward Achieving Universal Health Coverage

Adam Wagstaff, Tania Dmytraczenko, Gisele Almeida, Leander Buisman, Patrick Hoang-Vu Eozenou, Caryn Bredenkamp, James A. Cercone, Yadira Diaz, Daniel Maceira, Silvia Molina, Guillermo Paraje, Fernando Ruiz, Flavia Sarti, John Scott, Martin Valdivia, and Heitor Werneck
Health Aff October 2015 34:1704-1712; doi:10.1377/hlthaff.2014.1453
Abstract
Two commonly used metrics for assessing progress toward universal health coverage involve assessing citizens' rights to health care and counting the number of people who are in a financial protection scheme that safeguards them from high health care payments. On these metrics most countries in Latin America have already "reached" universal health coverage. Neither metric indicates, however, whether a country has achieved universal health coverage in the now commonly accepted sense of the term: that everyone—irrespective of their ability to pay—gets the health services they need without suffering undue financial hardship. We operationalized a framework proposed by the World Bank and the World Health Organization to monitor progress under this definition and then constructed an overall index of universal health coverage achievement. We applied the approach using data from 112 household surveys from 1990 to 2013 for all twenty Latin American countries. No country has achieved a perfect universal health coverage score, but some countries (including those with more integrated health systems) fare better than others. All countries except one improved in overall universal health coverage over the time period analyzed.

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

Health Economics, Policy and Law
Volume 10 - Special Issue 04 - October 2015
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
SPECIAL ISSUE: 10th Anniversary Issue
[Reviewed earlier]

Health Policy and Planning
Volume 30 Issue 8 October 2015
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems
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Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 11, Issue 9, 2015
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

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

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 10 October 2015]
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Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 10 October 2015]
Research Article
The economic burden of influenza-associated outpatient visits and hospitalizations in China: a retrospective survey
Juan Yang, Mark Jit, Kathy Leung, Ya-ming Zheng, Lu-zhao Feng, Li-ping Wang, Eric Lau, Joseph Wu, Hong-jie Yu Infectious Diseases of Poverty 2015, 4:44 (6 October 2015)
Editor's summary
This study estimated the direct and indirect costs of seasonal influenza-associated outpatient visits and hospitalizations in China from a societal perspective by conducting a retrospective telephone survey. The study is important to provide information on the burden of disease and the cost-effectiveness studies of seasonal influenza vaccination in China.

International Health
Volume 7 Issue 10 October 2015
http://inthealth.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Epidemiology
Volume 44 Issue 4 August 2015
http://ije.oxfordjournals.org/content/current
[New issue; No relevant content identified]

International Journal of Infectious Diseases
October 2015 Volume 39, In Progress
http://www.ijidonline.com/issue/S1201-9712%2815%29X0010-5

Cholera in pregnancy: Clinical and immunological aspects
Ashraful I. Khan, Fahima Chowdhury, Daniel T. Leung, Regina C. Larocque, Jason B. Harris, Edward T. Ryan, Stephen B. Calderwood, Firdausi Qadri
p20–24
Published online: August 14 2015
Preview
Cholera is a life threatening diarrheal disease caused predominantly by infection with *Vibrio cholerae* O1. Though cholera is rare in developed countries, it is prevalent in many areas of South and Southeast Asia and in Africa and may also cause major outbreaks worldwide.[1] Bangladesh is a country in South Asia where cholera is endemic and is consistently present throughout the year in high risk areas.[2] Cholera toxin (CT), the primary toxin produced by *V. cholerae* O1 and O139, causes the hypersecretion of electrolytes and water, sometimes with fatal results.

JAMA
October 6, 2015, Vol 314, No. 13
http://jama.jamanetwork.com/issue.aspx
[New issue; No relevant content identified]

JAMA Pediatrics
October 2015, Vol 169, No. 10
http://archpedi.jamanetwork.com/issue.aspx
American Pediatric Society
Global Collaboration to Develop New and Existing Drugs for Neonates
Jonathan M. Davis, MD; Mark A. Turner, MB, PhD, MRCPCH
This Viewpoint discusses the specific areas that should be considered by global investigators when collaborating on the development of drugs for neonatal patients.
Neonates do not have access to medicines that have been adequately tested for dosing, safety, and efficacy.1 Physicians must use their best judgment to make up for these knowledge gaps, leading to incorrect, and possibly harmful, doses of unnecessary and expensive medications. Some experts even believe that it is difficult or unethical for research to be conducted in neonates.2 Neither of these beliefs are justified, and it is inappropriate to expose neonates to potential risk without conclusive evidence that the drugs they are receiving are safe and efficacious. Neonates must participate in all stages of drug development in trials that use contemporary methods, because the health care industry has an ethical duty to meet the needs of this population.3

Review
Influenza A Virus Infection, Innate Immunity, and Childhood
Bria M. Coates, MD; Kelly L. Staricha; Kristin M. Wiese, MD; Karen M. Ridge, PhD
Abstract
Infection with influenza A virus is responsible for considerable morbidity and mortality in children worldwide. While it is apparent that adequate activation of the innate immune system is essential for pathogen clearance and host survival, an excessive inflammatory response to infection is detrimental to the young host. A review of the literature indicates that innate immune responses change throughout childhood. Whether these changes are genetically

programmed or triggered by environmental cues is unknown. The objectives of this review are to summarize the role of innate immunity in influenza A virus infection in the young child and to highlight possible differences between children and adults that may make children more susceptible to severe influenza A infection. A better understanding of age-related differences in innate immune signaling will be essential to improve care for this high-risk population.

Journal of Community Health
Volume 40, Issue 5, October 2015
http://link.springer.com/journal/10900/40/4/page/1
[Reviewed earlier]

Journal of Epidemiology & Community Health
October 2015, Volume 69, Issue 10
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 11, Issue 2, 2015
http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8
[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)
July-September 2015 Volume 7 | Issue 3 Page Nos. 95-124
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 26, Number 3, August 2015
https://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.26.3.html
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 17, Issue 5, October 2015
http://link.springer.com/journal/10903/17/4/page/1
[Reviewed earlier]

Journal of Immigrant & Refugee Studies
Volume 13, Issue 3, 2015
http://www.tandfonline.com/toc/wimm20/current#.VQS0KOFnBhW
Special Issue: Social Work and Migration in Europe [Reviewed earlier]

[Reviewed earlier]

Journal of Infectious Diseases
Volume 212 Issue 7 October 1, 2015
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The Journal of Law, Medicine & Ethics
Summer 2015 Volume 43, Issue 2 Pages 174–430
http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-2/issuetoc
Special Issue: SYMPOSIUM: Intersections in Reproduction: Perspectives on Abortion and Assisted Reproductive Technologies
[Reviewed earlier]

Journal of Medical Ethics
October 2015, Volume 41, Issue 10
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[New issue; No relevant content identified]

Journal of Medical Internet Research
Vol 17, No 5 (2015): May
http://www.jmir.org/2015/5
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Journal of Medical Microbiology
Volume 64, Issue 9, September 2015
http://jmm.sgmjournals.org/content/journal/jmm/64/9
[Reviewed earlier]

Journal of Patient-Centered Research and Reviews
Volume 2, Issue 3 (2015)
http://digitalrepository.aurorahealthcare.org/jpcrr/
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 4 Issue 3 September 2015
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Pediatrics

October 2015 Volume 167, Issue 4 , Supplement, S1-S50
http://www.jpeds.com/current
Recommended Iron Levels for Nutritional Formulas for Infants (0 – 12 months)
Edited by Ronald E. Kleinman

Journal of Public Health Policy
Volume 36, Issue 3 (August 2015)
http://www.palgrave-journals.com/jphp/journal/v36/n3/index.html
[Reviewed earlier]

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

Journal of Virology
October 2015, volume 89, issue 19
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Oct 10, 2015 Volume 386 Number 10002 p1419-1508 e17
http://www.thelancet.com/journals/lancet/issue/current
Comment
At last, vaccine-induced protection against Helicobacter pylori
Philip Sutton
Published Online: 30 June 2015
DOI: http://dx.doi.org/10.1016/S0140-6736(15)60579-7
Summary
For a quarter of a century, countless attempts have been made to produce an effective vaccine against Helicobacter pylori, a major cause of peptic ulcer disease and gastric adenocarcinoma.1 An effective vaccine against H pylori is needed most for prevention of gastric adenocarcinoma, the third leading cause of cancer-related death worldwide.2 However, efforts to produce such a vaccine have so far failed, and H pylori vaccine research has slowed in the past few years. The main reason for this might have been disillusionment, arising from the inability to produce a vaccine that completely protects against the infection.

Efficacy, safety, and immunogenicity of an oral recombinant Helicobacter pylori vaccine in children in China: a randomised, double-blind, placebo-controlled, phase 3 trial
Ming Zeng, Xu-Hu Mao, Jing-Xin Li, Wen-De Tong, Bin Wang, Yi-Ju Zhang, Gang Guo, Zhi-Jing Zhao, Liang Li, De-Lin Wu, Dong-Shui Lu, Zhong-Ming Tan, Hao-Yu Liang, Chao Wu, Da-Han Li, Ping Luo, Hao Zeng, Wei-Jun Zhang, Jin-Yu Zhang, Bo-Tao Guo, Feng-Cai Zhu, Quan-Ming Zou
1457

Summary
Background
Helicobacter pylori is one of the most common gastric pathogens, affecting at least half the world's population, and is strongly associated with gastritis, peptic ulcer, gastric adenocarcinoma, and lymphoma. We aimed to assess the efficacy, safety, and immunogenicity of a three-dose oral recombinant H pylori vaccine in children in China.
Methods
We did this randomised, double-blind, placebo-controlled, phase 3 trial at one centre in Ganyu County, Jiangsu Province, China. Healthy children aged 6–15 years without past or present H pylori infection were randomly assigned (1:1), via computer-generated randomisation codes in blocks of ten, to receive the H pylori vaccine or placebo. Participants, their guardians, and study investigators were masked to treatment allocation. The primary efficacy endpoint was the occurrence of H pylori infection within 1 year after vaccination. We did analysis in the per-protocol population. This trial is registered with ClinicalTrials.gov, number NCT02302170.
Findings
Between Dec 2, 2004, and March 19, 2005, we randomly assigned 4464 participants to either the vaccine group (n=2232) or the placebo group (n=2232), of whom 4403 (99%) participants completed the three-dose vaccination schedule and were included in the per-protocol efficacy analysis. We extended follow-up to 3 years. We recorded 64 events of H pylori infection within the first year (14 events in 2074·3 person-years at risk in the vaccine group vs 50 events in 2089·6 person-years at risk in the placebo group), resulting in a vaccine efficacy of 71·8% (95% CI 48·2–85·6). 157 (7%) participants in the vaccine group and 161 (7%) participants in the placebo group reported at least one adverse reaction. Serious adverse events were reported in five (<1%) participants in the vaccine group and seven (<1%) participants in the placebo group, but none was considered to be vaccination related.
Interpretation
The oral recombinant H pylori vaccine was effective, safe, and immunogenic in H pylori-naive children. This vaccine could substantially reduce the incidence of H pylori infection; however, follow up over a longer period is needed to confirm the protection of the vaccine against H pylori-associated diseases.
Funding
Chongqing Kangwei Biological Technology.

The Lancet Global Health
Oct 2015 Volume 3 Number 10 e576-e654
http://www.thelancet.com/journals/langlo/issue/current
Comment
New WHO recommendations to improve the outcomes of preterm birth
Joshua P Vogel, Olufemi T Oladapo, Alexander Manu, A Metin Gülmezoglu, Rajiv Bahl
DOI: http://dx.doi.org/10.1016/S2214-109X(15)00183-7
Summary
An estimated 15 million babies are born preterm annually.1 Preterm birth complications account for more than 15% of deaths in children younger than 5 years2 and survivors often have long-term consequences with respect to their health, growth, and psychosocial functioning.3,4 The most beneficial interventions available are those that improve newborn outcomes when preterm birth is inevitable (tertiary interventions) and those that focus on special care for preterm

newborns. Today WHO publishes new recommendations on interventions for pregnant women in whom preterm birth is imminent (including antenatal corticosteroids, tocolytics, magnesium sulfate, antibiotics, and mode of delivery) and for care of preterm neonates (including thermal care, continuous positive airway pressure [CPAP], surfactant administration, and oxygen therapy) to improve preterm birth outcomes.

The Lancet Infectious Diseases
Oct 2015 Volume 15 Number 10 p1115-1242
http://www.thelancet.com/journals/laninf/issue/current

Editorial

MERS—an uncertain future

The Lancet Infectious Diseases
DOI: http://dx.doi.org/10.1016/S1473-3099(15)00324-2

Summary

Middle East respiratory syndrome (MERS), caused by the MERS coronavirus, has taken something of a back seat to Ebola among emerging diseases, but following the outbreak in South Korea earlier this year and a recent upsurge in cases in Saudi Arabia the disease is again in the limelight. 3 years after MERS was first reported, WHO has recorded 1517 confirmed cases worldwide with 539 deaths, a case fatality rate of 36%. Risk factors for infection include being aged at least 50 years and having an underlying medical condition such as diabetes.

Comment

Good news for billions of children who will receive IPV

Kimberly M Thompson

Published Online: 16 August 2015
DOI: http://dx.doi.org/10.1016/S1473-3099(15)00099-7

Summary

In The Lancet Infectious Diseases, Shahed Iqbal and colleagues1 present their analysis of data from the US Vaccine Adverse Event Reporting System (VAERS), the largest database of reported events temporally associated with, but not necessarily causally related to, the delivery

of inactivated poliovirus vaccine (IPV). Their results show low numbers of temporally associated events reported with the delivery of more than 250 million IPV doses in the USA and no substantial adverse events, which confirms the safety of IPV.

Comment

Overcoming barriers to polio eradication in conflict areas

Julie R Garon, Walter A Orenstein

Summary

Substantial progress has been made in the effort to eradicate polio. In 1988, the year the eradication effort began, an estimated 350 000 people were paralysed by poliovirus infection, which was regarded as endemic in 125 countries. By contrast, in 2014, 359 cases were detected worldwide, and only three countries are currently deemed endemic: Pakistan, Nigeria, and Afghanistan.1 Further progress has been made, particularly in Nigeria, which as of June 17, 2015, has not seen a case of polio caused by wild viruses since July 24, 2014, or a case of circulating vaccine-derived poliovirus type 2 since Nov 16, 2014.

Article

The effect of dose on the safety and immunogenicity of the VSV Ebola candidate vaccine: a randomised double-blind, placebo-controlled phase 1/2 trial

Angela Huttner, Julie-Anne Dayer, Sabine Yerly, Christophe Combescure, Floriane Auderset, Jules Desmeules, Markus Eickmann, Axel Finckh, Ana Rita Goncalves, Jay W Hooper, Gürkan Kaya, Verena Krähling, Steve Kwilas, Barbara Lemaître, Alain Matthey, Peter Silvera, Stephan Becker, Patricia E Fast, Vasee Moorthy, Marie Paule Kieny, Laurent Kaiser, Claire-Anne Siegrist, VSV-Ebola Consortium

Summary

Background

Safe and effective vaccines against Ebola could prevent or control outbreaks. The safe use of replication-competent vaccines requires a careful dose-selection process. We report the first safety and immunogenicity results in volunteers receiving 3X 105 plaque-forming units (pfu) of the recombinant vesicular stomatitis virus-based candidate vaccine expressing the Zaire Ebola virus glycoprotein (rVSV-ZEBOV; low-dose vaccinees) compared with 59 volunteers who had received 1X107 pfu (n=35) or 5X 107 pfu (n=16) of rVSV-ZEBOV (high-dose vaccinees) or placebo (n=8) before a safety-driven study hold.

Methods

The Geneva rVSV-ZEBOV study, an investigator-initiated phase 1/2, dose-finding, placebo-controlled, double-blind trial conducted at the University Hospitals of Geneva, Switzerland, enrolled non-pregnant, immunocompetent, and otherwise healthy adults aged 18–65 years. Participants from the low-dose group with no plans to deploy to Ebola-aff5cted regions (non-deployable) were randomised 9:1 in a double-blind fashion using randomly permuted blocks of varying sizes to a single injection of 3X 105 pfu or placebo, whereas deployable participants received single-injection 3X 105 pfu open-label. Primary safety and immunogenicity outcomes were the incidence of adverse events within 14 days of vaccination and day-28 antibody titres, respectively, analysed by intention to treat. After viral oligoarthritis was observed in 11 of the first 51 vaccinees (22%) receiving 107 or 5X 107 pfu, 56 participants were given a lower dose (3X 105 pfu, n=51) or placebo (n=5) to assess the effect of dose reduction on safety and immunogenicity. This trial is ongoing with a follow-up period of 12 months; all reported results are from interim databases. This study is registered with ClinicalTrials.gov, number NCT02287480.

Findings
Between Jan 5 and Jan 26, 2015, 43 non-deployable participants received low-dose rVSV-ZEBOV (3X 105 pfu) or placebo in a double-blind fashion, whereas 13 deployable participants received 3X 105 pfu open-label. Altogether, in the low-dose group, 51 participants received rVSV-ZEBOV and five received placebo. No serious adverse events occurred. At 3X 105 pfu, early-onset reactogenicity remained frequent (45 [88%] of 51 compared with 50 [98%] of 51 high dose and two [15%] of 13 placebo recipients), but mild. Objective fever was present in one (2%) of 51 low-dose versus 13 (25%) of 51 high-dose vaccinees receiving at least 1X107 pfu (p<0·0001). Subjective fever (p<0·0001), myalgia (p=0·036), and chills (p=0·026) were significantly reduced and their time of onset delayed, reflecting significantly lower viraemia (p<0·0001) and blood monocyte-activation patterns (p=0·0233). Although seropositivity rates remained similarly high (48 [94%] of 51), day-28 EBOV-glycoprotein-binding and neutralising antibody titres were lower in low-dose versus high-dose vaccinees (geometric mean titres 344·5 [95% CI 229·7–516·4] vs 1064·2 [757·6–1495·1]; p<0·0001; and 35·1 [24·7–50·7] vs 127·0 [86·0–187·6]; p<0·0001, respectively). Furthermore, oligoarthritis again occurred on day 10 (median; IQR 9–14) in 13 (25%) of 51 low-dose vaccinees, with maculopapular, vesicular dermatitis, or both in seven (54%) of 13; arthritis was associated with increasing age in low-dose but not high-dose vaccinees. Two vaccinees presented with purpura of the lower legs; histological findings indicated cutaneous vasculitis. The presence of rVSV in synovial fluid and skin lesions confirmed causality.
Interpretation
Reducing the dose of rVSV-ZEBOV improved its early tolerability but lowered antibody responses and did not prevent vaccine-induced arthritis, dermatitis, or vasculitis. Like its efficacy, the safety of rVSV-ZEBOV requires further definition in the target populations of Africa.
Funding
Wellcome Trust through WHO.

Preparation for global introduction of inactivated poliovirus vaccine: safety evidence from the US Vaccine Adverse Event Reporting System, 2000–12

Shahed Iqbal, Jing Shi, Katherine Seib, Paige Lewis, Pedro L Moro, Emily J Woo, Tom Shimabukuro, Walter A Orenstein

Summary
Background
Safety data from countries with experience in the use of inactivated poliovirus vaccine (IPV) are important for the global polio eradication strategy to introduce IPV into the immunisation schedules of all countries. In the USA, IPV has been included in the routine immunisation schedule since 1997. We aimed to analyse adverse events after IPV administration reported to the US Vaccine Adverse Event Reporting System (VAERS).
Methods
We analysed all VAERS data associated with IPV submitted between Jan 1, 2000, and Dec 31, 2012, either as individual or as combination vaccines, for all age and sex groups. We analysed the number and event type (non-serious, non-fatal serious, and death reports) of individual reports, and explored the most commonly coded event terms to describe the adverse event. We classified death reports according to previously published body-system categories (respiratory, cardiovascular, neurological, gastrointestinal, other infectious, and other non-infectious) and reviewed death reports to identify the cause of death. We classified sudden infant death syndrome as a separate cause of death considering previous concerns about sudden infant syndrome after vaccines. We used empirical Bayesian data mining methods to identify

disproportionate reporting of adverse events for IPV compared with other vaccines. Additional VAERS data from 1991 to 2000 were analysed to compare the safety profiles of IPV and oral poliovirus vaccine (OPV).
Findings
Of the 41 792 adverse event reports submitted, 39 568 (95%) were for children younger than 7 years. 38 381 of the reports for children in this age group (97%) were for simultaneous vaccination with IPV and other vaccines (most commonly pneumococcal and acellular pertussis vaccines), whereas standalone IPV vaccines accounted for 0·5% of all reports. 34 880 reports were for non-serious events (88%), 3905 reports were for non-fatal serious events (10%), and 783 reports were death reports (2%). Injection-site erythema was the most commonly coded term for non-serious events (29%), and pyrexia for non-fatal serious events (38%). Most deaths (96%) were in children aged 12 months or younger; most (52%) had sudden infant death syndrome as the reported cause of death. The safely profiles of combined IPV and whole-cell pertussis vaccines, OPV and whole-cell pertussis vaccines, and OPV and acellular pertussis vaccines were similar. We noted no indication of disproportionate reporting of adverse events after immunisation with IPV-containing vaccines compared with other vaccines between 1990 and 2013.
Interpretation
Fairly few adverse events were reported for the more than 250 million IPV doses distributed between 2000 and 2012. Sudden infant death syndrome reports after IPV were consistent with reporting patterns for other vaccines. No new or unexpected vaccine safety problems were identified for fatal, non-fatal serious, and non-serious reports in this assessment of adverse events after IPV.
Funding
None.

Threats to polio eradication in high-conflict areas in Pakistan and Nigeria: a polling study of caregivers of children younger than 5 years

Gillian K SteelFisher, Robert J Blendon, Sherine Guirguis, Amanda Brulé, Narayani Lasala-Blanco, Michael Coleman, Vincent Petit, Mashrur Ahmed, Noah Mataruse, Melissa Corkum, Mazhar Nisar, Eran N Ben-Porath, Susan Gigli, Christoph Sahm
Summary
Background
Elimination of poliovirus from endemic countries is a crucial step in eradication; however, vaccination programmes in these areas face challenges, especially in regions with conflict. We analysed interviews with caregivers of children living in two polio-endemic countries to assess whether these challenges are largely operational or also driven by resistance or misinformation in the community.
Methods
We designed and analysed polls based on face-to-face interviews of a random sample of parents and other caregivers of children younger than 5 years in regions of Pakistan and Nigeria at high risk for polio transmission. In both countries, the sample was drawn via a stratified multistage cluster design with random route household selection. The questionnaire covered awareness, knowledge, and attitudes about polio and oral polio vaccine (OPV), trust in vaccination efforts, and caregiver priorities for government action. We assessed experiences of caregivers in accessible higher-conflict areas and compared their knowledge and attitudes with those in lower-conflict areas. Differences were tested with two-sample t tests.
Findings

The poll consisted of 3396 caregivers from Pakistan and 2629 from Nigeria. About a third of caregivers who responded in higher-conflict areas of Pakistan (Federally Administered Tribal Areas [FATA], 30%) and Nigeria (Borno, 33%) were unable to confirm that their child was vaccinated in the previous campaign. In FATA, 12% of caregivers reported that they were unaware of polio, and in Borno 12% of caregivers reported that vaccinators visited but their child did not receive the vaccine or they did not know whether the child was vaccinated. Additionally, caregivers in higher-conflict areas are less likely to hold beliefs about OPV that could motivate acceptance and are more likely to hold concerns than are caregivers in lower-conflict areas.

Interpretation

Beyond the difficulties in reaching homes with OPV, challenges for vaccination programmes in higher-conflict areas extend to limited awareness, negative attitudes, and gaps in trust. Vaccination efforts might need to address underlying attitudes of caregivers through direct communications and the selection and training of local vaccinators.

Funding

Harvard T H Chan School of Public Health and UNICEF.

Out-of-pocket health expenditures and antimicrobial resistance in low-income and middle-income countries: an economic analysis

Marcella Alsan, Lena Schoemaker, Karen Eggleston, Nagamani Kammili, Prasanthi Kolli, Jay Bhattacharya

Summary

Introduction

The decreasing effectiveness of antimicrobial agents is a growing global public health concern. Low-income and middle-income countries are vulnerable to the loss of antimicrobial efficacy because of their high burden of infectious disease and the cost of treating resistant organisms. We aimed to assess if copayments in the public sector promoted the development of antibiotic resistance by inducing patients to purchase treatment from less well regulated private providers.

Methods

We analysed data from the WHO 2014 Antibacterial Resistance Global Surveillance report. We assessed the importance of out-of-pocket spending and copayment requirements for public sector drugs on the level of bacterial resistance in low-income and middle-income countries, using linear regression to adjust for environmental factors purported to be predictors of resistance, such as sanitation, animal husbandry, and poverty, and other structural components of the health sector. Our outcome variable of interest was the proportion of bacterial isolates tested that showed resistance to a class of antimicrobial agents. In particular, we computed the average proportion of isolates that showed antibiotic resistance for a given bacteria-antibacterial combination in a given country.

Findings

Our sample included 47 countries (23 in Africa, eight in the Americas, three in Europe, eight in the Middle East, three in southeast Asia, and two in the western Pacific). Out-of-pocket health expenditures were the only factor significantly associated with antimicrobial resistance. A ten point increase in the percentage of health expenditures that were out-of-pocket was associated with a 3·2 percentage point increase in resistant isolates (95% CI 1·17–5·15; p=0·002). This association was driven by countries requiring copayments for drugs in the public health sector. Of these countries, moving from the 20th to 80th percentile of out-of-pocket health

expenditures was associated with an increase in resistant bacterial isolates from 17·76% (95% CI 12·54–22·97) to 36·27% (31·16–41·38).
Interpretation
Out-of-pocket health expenditures were strongly correlated with antimicrobial resistance in low-income and middle-income countries. This relation was driven by countries that require copayments on drugs in the public sector. Our data suggest cost-sharing of antimicrobials in the public sector might drive demand to the private sector in which supply-side incentives to overprescribe are probably heightened and quality assurance less standardised.
Funding
National Institutes of Health.

Personal View
The Israeli public health response to wild poliovirus importation
Ehud Kaliner, Eran Kopel, Emilia Anis, Ella Mendelson, Jacob Moran-Gilad, Lester M Shulman, Shepherd R Singer, Yossi Manor, Eli Somekh, Shmuel Rishpon, Alex Leventhal, Lisa Rubin, Diana Tasher, Mira Honovich, Larisa Moerman, Tamy Shohat, Ravit Bassal, Danit Sofer, Michael Gdalevich, Boaz Lev, Ronni Gamzu, Itamar Grotto

Maternal and Child Health Journal
Volume 19, Issue 10, October 2015
http://link.springer.com/journal/10995/19/10/page/1
[New issue; No relevant content identified]

Medical Decision Making (MDM)
October 2015; 35 (7)
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
September 2015 Volume 93, Issue 3 Pages 447–649
http://onlinelibrary.wiley.com/doi/10.1111/milq.2015.93.issue-3/issuetoc
[Reviewed earlier]

Nature
Volume 526 Number 7572 pp164-286 8 October 2015
http://www.nature.com/nature/current_issue.html
World View
Make vaccine coverage a key UN health indicator
Track progress towards universal care using a wide-reaching intervention that all countries can readily measure, says Seth Berkley.

The effect of malaria control on Plasmodium falciparum in Africa between 2000 and 2015

S. Bhatt, D. J. Weiss, E. Cameron, D. Bisanzio, B. Mappin+ et al.
In this study, the authors present an analysis of the malaria burden in sub-Saharan Africa between 2000 and 2015, and quantify the effects of the interventions that have been implemented to combat the disease; they find that the prevalence of Plasmodium falciparum infection has been reduced by 50% since 2000 and the incidence of clinical disease by 40%, and that interventions have averted approximately 663 million clinical cases since 2000, with insecticide-treated bed nets being the largest contributor.

Nature Medicine
October 2015, Volume 21 No 10 pp1103-1234
http://www.nature.com/nm/journal/v21/n10/index.html
[New issue; No relevant content identified]

Nature Reviews Immunology
October 2015 Vol 15 No 10
http://www.nature.com/nri/journal/v15/n10/index.html
[New issue; No relevant content identified]

New England Journal of Medicine
October 8, 2015 Vol. 373 No. 15
http://www.nejm.org/toc/nejm/medical-journal
Perspective
Shifting to Sustainable Development Goals — Implications for Global Health
Christopher J.L. Murray, M.D., D.Phil.
N Engl J Med 2015; 373:1390-1393
October 8, 2015
DOI: 10.1056/NEJMp1510082
Preview
The Millennium Development Goals have brought remarkable success for global collective action. Unfortunately, the new Sustainable Development Goals are broad, with many aspirational or vague targets, and health does not occupy as central a role as it did in the MDG

Pediatrics
October 2015, VOLUME 136 / ISSUE 4
http://pediatrics.aappublications.org/current.shtml
Monthly Feature
Treating Children With Cancer Worldwide—Challenges and Interventions
Trijn Israels, Julia Challinor, Scott Howard, and Ramandeep Harman Arora
Pediatrics 2015; 136:607-610
Summary
Although morbidity from childhood cancer is second only to unintentional injuries in high-income countries, in low-income countries, it hardly hits the radar screen compared with death from pneumonia, diarrhea, malaria, neonatal sepsis, preterm birth, and neonatal asphyxia. Nevertheless, the extraordinary progress made in treating childhood cancer in high-income

countries brings into harsh focus the mammoth disparities that exist in impoverished areas of the world. As the capacity to diagnose and treat childhood cancer improves in low- and middle-income countries, the ability to improve outcomes for the more common diseases benefits as well. The authors have summarized the issues related to childhood cancer care with thoughtful attention to how children everywhere can gain from the advances in medical science in high-income nations.
Jay E. Berkelhamer
Column Editor

Febrile Seizures After 2010–2011 Trivalent Inactivated Influenza Vaccine

Alison Tse Kawai, David Martin, Martin Kulldorff, Lingling Li, David V. Cole, Cheryl N. McMahill-Walraven, Nandini Selvam, Mano S. Selvan, and Grace M. Lee
Pediatrics 2015; 136:e848-e855
Abstract
OBJECTIVES: In the Post-Licensure Rapid Immunization Safety Monitoring Program, we examined risk of febrile seizures (FS) after trivalent inactivated influenza vaccine (TIV) and 13-valent pneumococcal conjugate vaccine (PCV13) during the 2010–2011 influenza season, adjusted for concomitant diphtheria tetanus acellular pertussis-containing vaccines (DTaP). Assuming children would receive both vaccines, we examined whether same-day TIV and PCV13 vaccination was associated with greater FS risk when compared with separate-day vaccination.
METHODS: We used a self-controlled risk interval design, comparing the FS rate in a risk interval (0–1 days) versus control interval (14–20 days). Vaccinations were identified in claims and immunization registry data. FS were confirmed with medical records.
RESULTS: No statistically significant TIV-FS associations were found in unadjusted or adjusted models (incidence rate ratio [IRR] adjusted for age, seasonality, and concomitant PCV13 and DTaP: 1.36, 95% confidence interval [CI] 0.78 to 2.39). Adjusted for age and seasonality, PCV13 was significantly associated with FS (IRR 1.74, 95% CI 1.06 to 2.86), but not when further adjusting for concomitant TIV and DTaP (IRR 1.61, 95% CI 0.91 to 2.82). Same-day TIV and PCV13 vaccination was not associated with excess risk of FS when compared with separate-day vaccination (1.08 fewer FS per 100 000 with same day administration, 95% CI −5.68 to 6.09).
CONCLUSIONS: No statistically significant increased risk of FS was found for 2010–2011 TIV or PCV13, when adjusting for concomitant vaccines. Same-day TIV and PCV13 vaccination was not associated with more FS compared with separate-day vaccination.

Clinical Trial Decisions in Difficult Circumstances: Parental Consent Under Time Pressure

Marijke C. Jansen-van der Weide, Patrina H.Y. Caldwell, Bridget Young, Martine C. de Vries, Dick L. Willems, William Van't Hoff, Kerry Woolfall, Johanna H. van der Lee, and Martin Offringa
Pediatrics 2015; 136:e983-e992
Abstract
Treatments and interventions used to care for children in emergencies should be based on strong evidence. Well-designed clinical trials investigating these interventions for children are therefore indispensable. Parental informed consent is a key ethical requirement for the enrollment of children in such studies. However, if time is limited because of an urgent need for intervention, there are additional ethical challenges to adequately support the informed consent process. The acute situation and associated psychological impact may compromise the ability of

parents to give informed consent. Little evidence exists to guide the process of consent seeking for a child's research participation when time is limited. It is also unclear in what circumstances alternatives to prospective informed consent could be applied. This article describes possible options to manage the informed consent process in an appropriate, practical, and, we believe, ethical way when time is limited.

Pharmaceutics
Volume 7, Issue 3 (September 2015), Pages 90-362
http://www.mdpi.com/1999-4923/7/3
[Reviewed earlier]

PharmacoEconomics
Volume 33, Issue 10, October 2015
http://link.springer.com/journal/40273/33/10/page/1
[New issue; No relevant content identified]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 10 October 2015]
[No new relevant content]

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
(Accessed 10 October 2015)
Improved Discrimination of Influenza Forecast Accuracy Using Consecutive Predictions
October 5, 2015 · Research
Introduction: The ability to predict the growth and decline of infectious disease incidence has advanced considerably in recent years. In particular, accurate forecasts of influenza epidemiology have been developed using a number of approaches.
Methods: Within our own group we produce weekly operational real-time forecasts of influenza at the municipal and state level in the U.S. These forecasts are generated using ensemble simulations depicting local influenza transmission dynamics, which have been optimized prior to forecast with observations of influenza incidence and data assimilation methods. The expected accuracy of a given forecast can be inferred in real-time through quantification of the agreement (e.g. the variance) among the ensemble of simulations.
Results: Here we show that forecast expected accuracy can be further discriminated with the additional consideration of the streak or persistence of the forecast—the number of consecutive weeks the forecast has converged to the same outcome.
Discussion: The findings indicate that the use of both the streak and ensemble agreement provides a more detailed and informative assessment of forecast expected accuracy.

PLoS Medicine

http://www.plosmedicine.org/
(Accessed 10 October 2015)
[No new relevant content identified]

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http://www.plosntds.org/
(Accessed 10 October 2015)
[No new relevant content identified]

PLoS One
http://www.plosone.org/
[Accessed 10 October 2015]
Achieving a "Grand Convergence" in Global Health: Modeling the Technical Inputs, Costs, and Impacts from 2016 to 2030
Colin F. Boyle, Carol Levin, Arian Hatefi, Solange Madriz, Nicole Santos
Research Article | published 09 Oct 2015 | PLOS ONE
10.1371/journal.pone.0140092
Abstract
Background
The Commission on Investing in Health published its report, GlobalHealth2035, in 2013, estimating an investment case for a grand convergence in health outcomes globally. In support of the drafting of the Sustainable Development Goals (SDGs), we estimate what the grand convergence investment case might achieve—and what investment would be required—by 2030.
Methods and Findings
Our projection focuses on a sub-set of low-income (LIC) or lower-middle-income countries (LMIC). We start with a country-based (bottom-up) analysis of the costs and impact of scaling up reproductive, maternal, and child health tools, and select HIV and malaria interventions. We then incorporate global (top-down) analyses of the costs and impacts of scaling up existing tools for tuberculosis, additional HIV interventions, the costs to strengthen health systems, and the costs and benefits from scaling up new health interventions over the time horizon of this forecast. These data are then allocated to individual countries to provide an aggregate projection of potential cost and impact at the country level. Finally, incremental costs of R&D for low-income economies and the costs of addressing NTDs are added to provide a global total cost estimate of the investment scenario.
Results
Compared with a constant coverage scenario, there would be more than 60 million deaths averted in LIC and 70 million deaths averted in LMIC between 2016 and 2030. For the years 2015, 2020, 2025, and 2030, the incremental costs of convergence in LIC would be (US billion) $24.3, $21.8, $24.7, and $27, respectively; in LMIC, the incremental costs would be (US billion) $34.75, $38.9, $48.7, and $56.3, respectively.
Conclusion
Key health outcomes in low- and low-middle income countries can significantly converge with those of wealthier countries by 2030, and the notion of a "grand convergence" may serve as a unifying theme for health indicators in the SDGs.

Seasonal Influenza Vaccination amongst Medical Students: A Social Network Analysis Based on a Cross-Sectional Study
Rhiannon Edge, Joseph Heath, Barry Rowlingson, Thomas J. Keegan, Rachel Isba
Research Article | published 09 Oct 2015 | PLOS ONE
10.1371/journal.pone.0140085

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(Accessed 10 October 2015)
[No new digest content identified]

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Vol 6 (2015)
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[Reviewed earlier]

Prehospital & Disaster Medicine
Volume 30 - Issue 05 - October 2015
https://journals.cambridge.org/action/displayIssue?jid=PDM&tab=currentissue
Special Reports
Research and Evaluations of the Health Aspects of Disasters, Part I: An Overview
Marvin L. Birnbaum, Elaine K. Daily, Ann P. O'Rourke and Alessandro Loretti
Research and Evaluations of the Health Aspects of Disasters, Part II: The Disaster Health Conceptual Framework Revisited
Marvin L. Birnbaum, Elaine K. Daily, Ann P. O'Rourke and Alessandro Loretti

Preventive Medicine
Volume 80, Pages 1-106 (November 2015)
http://www.sciencedirect.com/science/journal/00917435/80
Special Issue: Behavior change, health, and health disparities
Edited by Stephen T. Higgins
Editorial: 2nd Special Issue on behavior change, health, and health disparities
Pages 1-4
Stephen T. Higgins
Abstract
This Special Issue of Preventive Medicine (PM) is the 2nd that we have organized on behavior change, health, and health disparities. This is a topic of fundamental importance to improving

population health in the U.S. and other industrialized countries that are trying to more effectively manage chronic health conditions. There is broad scientific consensus that personal behavior patterns such as cigarette smoking, other substance abuse, and physical inactivity/obesity are among the most important modifiable causes of chronic disease and its adverse impacts on population health. As such behavior change needs to be a key component of improving population health. There is also broad agreement that while these problems extend across socioeconomic strata, they are overrepresented among more economically disadvantaged populations and contribute directly to the growing problem of health disparities. Hence, behavior change represents an essential step in curtailing that unsettling problem as well. In this 2nd Special Issue, we devote considerable space to the current U.S. prescription opioid addiction epidemic, a crisis that was not addressed in the prior Special Issue. We also continue to devote attention to the two largest contributors to preventable disease and premature death, cigarette smoking and physical inactivity/obesity as well as risks of co-occurrence of these unhealthy behavior patterns. Across each of these topics we included contributions from highly accomplished policy makers and scientists to acquaint readers with recent accomplishments as well as remaining knowledge gaps and challenges to effectively managing these important chronic health problems.

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

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

Qualitative Health Research
October 2015; 25 (10)
http://qhr.sagepub.com/content/current
[Reviewed earlier]

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 10 October 2015]
No new relevant content identified]

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

[Reviewed earlier]

Risk Analysis
September 2015 Volume 35, Issue 9 Pages 1593–1763
http://onlinelibrary.wiley.com/doi/10.1111/risa.2015.35.issue-9/issuetoc
[Reviewed earlier]

Science
9 October 2015 vol 350, issue 6257, pages 133-248
http://www.sciencemag.org/current.dtl
[New issue; No relevant content identified]

Social Science & Medicine
Volume 140, Pages 1-146 (September 2015)
http://www.sciencedirect.com/science/journal/02779536/140
[Reviewed earlier]

Tropical Medicine and Health
Vol. 43(2015) No. 3
https://www.jstage.jst.go.jp/browse/tmh/43/0/_contents
[New issue; No relevant content identified]

Tropical Medicine & International Health
October 2015 Volume 20, Issue 10 Pages 1257–1404
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2015.20.issue-7/issuetoc
[Reviewed earlier]

Vaccine
Volume 33, Issue 41, Pages 5333-5488 (5 October 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/41
[Reviewed earlier]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 10 October 2015)
Review:
Cell Membrane-Coated Nanoparticles As an Emerging Antibacterial Vaccine Platform
by Pavimol Angsantikul, Soracha Thamphiwatana, Weiwei Gao and Liangfang Zhang
Vaccines 2015, 3(4), 814-828; doi:10.3390/vaccines3040814 - published 6 October 2015
Abstract:

Nanoparticles have demonstrated unique advantages in enhancing immunotherapy potency and have drawn increasing interest in developing safe and effective vaccine formulations. Recent technological advancement has led to the discovery and development of cell membrane-coated nanoparticles, which combine the rich functionalities of cellular membranes and the engineering flexibility of synthetic nanomaterials. This new class of biomimetic nanoparticles has inspired novel vaccine design strategies with strong potential for modulating antibacterial immunity. This article will review recent progress on using cell membrane-coated nanoparticles for antibacterial vaccination. Specifically, two major development strategies will be discussed, namely (i) vaccination against virulence factors through bacterial toxin sequestration; and (ii) vaccination against pathogens through mimicking bacterial antigen presentation.

Value in Health
September 2015 Volume 18, Issue 6, p739-940
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

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

Policy Insights from the Behavioral and Brain Sciences
October 2015 vol. 2 no. 1 61-73
Using Behavioral Insights to Increase Vaccination Policy Effectiveness
Cornelia Betsch[1], Robert Böhm[2], Gretchen B. Chapman[3]
1University of Erfurt, Germany
2RWTH Aachen University, Germany
3Rutgers University, Piscataway, NJ, USA
Cornelia Betsch, Department of Psychology and Center for Empirical Research in Economics and Behavioral Sciences (CEREB), University of Erfurt, Nordhäuser Str. 63, 99089 Erfurt, Germany.
Email: cornelia.betsch@uni-erfurt.de
Abstract
Even though there are policies in place, and safe and effective vaccines available, almost every country struggles with vaccine hesitancy, that is, a delay in acceptance or refusal of vaccination. Consequently, it is important to understand the determinants of individual vaccination decisions to establish effective strategies to support the success of country-specific public health policies. Vaccine refusal can result from complacency, inconvenience, a lack of confidence, and a rational calculation of pros and cons. Interventions should, therefore, be carefully targeted to focus on the reason for non-vaccination. We suggest that there are several interventions that may be effective for complacent, convenient, and calculating individuals whereas interventions that might be effective for those who lack confidence are scarce. Thus, efforts should be concentrated on motivating the complacent, removing barriers for those for whom vaccination is inconvenient, and adding incentives and additional utility for the calculating. These strategies

might be more promising, economic, and effective than convincing those who lack confidence in vaccination.

Future Microbiology
Posted online on October 6, 2015.
(doi:10.2217/fmb.15.90)
Clinical development of RTS, S/AS malaria vaccine: a systematic review of clinical Phase I-III trials
Selidji T Agnandji*,1,2, José F Fernandes1,2, Emmanuel B Bache1,2 & Michael Ramharter1,2,3
Summary
The first clinical Phase III trial evaluating a malaria vaccine was completed in December 2013 at 11 sites from seven sub-Saharan African countries. This systematic review assesses data of Phase I–III trials including malaria-naive adults and adults, children and infants from malaria endemic settings in sub-Saharan Africa. The main endpoint of this systematic review was an analysis of the consistency of efficacy and immunogenicity data from respective Phase I–III trials. In addition, safety data from a pooled analysis of RTS/AS Phase II trials and RTS,S/AS01 Phase III trial were reviewed. The RTS,S/AS01 malaria vaccine may become available on the market in the coming year. If so, further strategies should address challenges on how to optimize vaccine efficacy and implementation of RTS,S/AS01 vaccine within the framework of established malaria control measures.

Drugs & Aging
First online: 06 October 2015
Immunogenicity and Safety of Intradermal Influenza Vaccine in the Elderly: A Meta-Analysis of Randomized Controlled Trials
Claudia Pileggi, Valentina Mascaro, Aida Bianco, Carmelo G. A. Nobile, Maria Pavia
Abstract
Introduction
Immunosenescence makes the elderly more susceptible to influenza complications and less responsive to vaccination. An intradermal formulation (IDflu) is one of several strategies being investigated to increase the immunogenicity of influenza vaccines.
Objective
The overall goal of the study was to assess the safety and immunogenicity of IDflu compared with the intramuscular route (IMflu) in the elderly.
Methods
A meta-analysis of randomized controlled trials (RCTs) was performed. Included articles met the following criteria: RCTs; primary studies, not re-analyses or reviews; enrolment of elderly people; comparing the immunogenicity and/or safety of IDflu with IMflu; measuring seroprotection and/or seroconversion rate to assess immunogenicity; measuring local reactions and/or general symptoms and/or other mild local reactions that could affect acceptability of vaccine as safety indicators, according to the European Medicines Agency (EMA) criteria; published through January 2015.
Results
The results of our meta-analysis on seroprotection showed that IDflu is comparable to IMflu for each strain (A/H1N1: risk ratio [RR] 1.02, 95 % confidence interval [CI] 0.98–1.07; A/H3N2: RR 1.01, 95 % CI 0.99–1.04; B 1.02, 95 % CI 0.98–1.08). The seroconversion rate achieved with

IDflu was comparable to that of the control group (A/H1N1: RR 1.08, 95 % CI 0.97–1.2; A/H3N2: RR 1.08, 95 % CI 0.96–1.21; B: RR 1.21, 95 % CI 1–1.45). Systemic reactogenicity appeared similar in the two groups, while local reactions were significantly more frequent in the IDflu group.
Conclusions
The novel IDflu appears to have the adequate balance between immunogenicity and safety in the elderly compared with IMflu, and its utilization may be considered among the possible strategies to enhance the control of seasonal influenza outbreaks according to the existing policy recommendations in the elderly.

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Media/Policy Watch

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

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

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 10 October 2015
The 4 Kinds of People Who Don't Vaccinate Their Kids – *And how to change their minds*
Julie Beck
Oct 6, 2015

"Vaccine hesitancy" is a delicate way of phrasing a serious public-health problem. The World Health Organization defines it as "delay in acceptance or refusal of vaccines despite availability of vaccination services."

There's a tendency to treat these vaccine-hesitant people as a monolith, the "anti-vaxers" who are putting everyone at risk. But people who don't vaccinate aren't just a homogenous mob of parents who fear toxins and want their kids to be exposed to chicken pox "the natural way." There are a variety of reasons why people decide not to vaccinate, and a new paper by researchers at Rutgers University and Germany's University of Erfurt and RWTH Aachen University, published in Policy Insights from the Behavioral and Brain Sciences, breaks down the psychology of four different types of non-vaccinators, in the hopes of finding effective strategies to change their minds…

BBC

http://www.bbc.co.uk/
Accessed 10 October 2015
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 10 October 2015
[No new, unique, relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 10 October 2015
[No new, unique, relevant content]

The Economist
http://www.economist.com/
Accessed 10 October 2015
Viruses and parasites
Eradicating disease
Viral and parasitic diseases are not only worth killing off, they are also increasingly vulnerable
Oct 10th 2015 | From the print edition
TO EXTERMINATE a living species by accident is normally frowned on. To do so deliberately might thus seem an extraordinary sin. But if that species is Plasmodium falciparum, the sin may be excused. This parasitic organism causes the most deadly form of malaria. Together with four cousins, it is responsible for about 450,000 deaths a year, and the ruination of the lives of millions more people who survive the initial crisis of disease. Besides the direct suffering this causes, the lost human potential is enormous. The Gates Foundation, an American charity, reckons that eradicating malaria would bring the world $2 trillion of benefits by 2040.

Malaria is one of the worst examples of the damage that transmissible diseases can wreak. But it is not alone. AIDS carries off fit, young adults by the millions and tuberculosis by the hundreds of thousands. Measles, whooping cough and diarrhoea together kill over 1m children a year. Parasitic worms and mosquito-borne viruses like dengue, though they take relatively few lives, debilitate many.

Campaigns have brought the toll down heroically. As recently as 2000, malaria killed around 850,000 people a year; likewise, since 2000 deaths from measles have fallen by 75%, to around 150,000. These successes are to be celebrated, but an even greater prize exists: to go beyond controlling infections and infestations and instead to eradicate some of them completely, by exterminating the pathogens and parasites that cause them. That has been accomplished a couple of times in the past, for smallpox (a human disease) and rinderpest (a cattle disease similar to measles). The end is reckoned to be close for polio (a virus that once killed and crippled millions) and dracunculiasis (a parasitic worm). But more must follow.

Swat teams
Some diseases are not suitable for eradication because the organisms that cause them hang around in the environment, or have other animal hosts. Others, such as tuberculosis, can infect people "silently", without causing symptoms, so are invisible to doctors. But sometimes the

culprit is a poverty of ambition. A list of five plausible targets—measles, mumps, rubella, filariasis and pork tapeworm—has hardly changed since the early 1990s, yet measles, mumps and rubella are all the subjects of intensive vaccination campaigns that could easily be converted into ones of eradication. And even though Swaziland is poised to become the first malaria-free country in sub-Saharan Africa (see article), only a few dare to make explicit the goal of ridding the planet of the disease. Hepatitis C should be made a target, too. It kills half a million a year, and affects rich and poor countries alike, yet new drugs against it are almost 100% effective and there are no silent carriers. Eradicating these seven diseases—the five, plus malaria and hepatitis C—would save a yearly total of 1.2m lives. It would transform countless more.

People argue that the cost of chasing down the last few cases of a disease is not worth it. If the mass-vaccination campaigns under way can lower the incidence of measles, mumps, rubella and so on in poor countries to something close to rich-world levels, the argument goes, that is surely good enough.

Well, it isn't. A disease can bounce back. That is what malaria did in the 1960s, when political attention waned, and the parasites that cause it evolved resistance to drugs and the mosquitoes that spread it evolved resistance to insecticides.

Three big improvements underpin the argument for throwing eradication's net more widely. The first is better communications. The technology for locating and monitoring cases of disease in poor countries, even when few and far between, has improved immeasurably in the past two decades with the spread of mobile phones and the internet, and the expansion of road networks.

The second is better medical technology. The reason filariasis is on the "possibles" list, for example, is the invention of ivermectin, a drug that kills the worm which causes it. The inventors of this drug won half of this year's Nobel prize for medicine (see article). The other half was won by the woman who came up with an answer to drug resistance in malaria—a medicine called artemisinin, which has been crucial to the success of the recent push against the disease. (This time, alert to the risk of resistance, doctors have formulated it with other drugs to create combination therapies that natural selection finds hard to get around.)

Even better technology is in the pipeline. In the case of mosquito-borne illnesses such as malaria and dengue, genetic engineering promises ways of making the insects resistant to the pathogens that they pass on to people, of crashing the mosquito population, and even of attacking insects and pathogens with genetically modified fungi and bacteria. Genetic engineering also promises a wide range of new vaccines.

The third reason for seeking eradication is a change in political attitudes. The emergence of AIDS, in particular, made governments everywhere sit up and take notice. Last year's west African outbreak of Ebola only reinforced the message. Political attention leads to better medical infrastructure. To deal with AIDS, new networks of clinics were created and staffed with trained personnel. These can serve as the backbone of the campaigns that would be the starting-point for many extermination programmes.

The Dalek doctrine

The list of candidates for such programmes should be extended as and when circumstances change. The biggest prize might be AIDS itself. Smallpox, the first target for eradication, was picked in part because the virus that caused it had only humans as hosts and could not survive independently for more than a few hours. It had, in other words, no hiding place. Both of these are true of HIV, the AIDS-causing virus. What is missing is the third ingredient for smallpox: a reliable vaccine.

Throughout history, humans and disease have waged a deadly and never-ending war. Today the casualties are chiefly the world's poorest people. But victory against some of the worst killers is at last within grasp. Seize it.

Financial Times
http://www.ft.com/hme/uk
Accessed 10 October 2015
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 10 October 2015
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 10 October 2015
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 10 October 2015
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 10 October 2015
[No new, unique, relevant content]

The Huffington Post
http://www.huffingtonpost.com/
Accessed 10 October 2015

Mail & Guardian
http://mg.co.za/
Accessed 10 October 2015
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 10 October 2015

[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 10 October 2015
Measure to Repeal California Vaccine Law Won't Be on Ballot
Six counties reported they received the petitions after the Sept. 28 deadline for submission. Gov. Jerry Brown signed the vaccine measure into law earlier this year amid fierce opposition from some parents' rights groups…
October 08, 2015 - By THE ASSOCIATED PRESS - U.S. - Print Headline: "Measure to Repeal California Vaccine Law Won't Be on Ballot"
High Court Won't Hear Challenge to NY School Vaccine Rules
students exempted from the immunization policy for religious reasons could still be barred from school during an outbreak of a vaccine-preventable disease. "I applaud the Supreme Court for letting stand the Second Circuit's decision
October 05, 2015 - By THE ASSOCIATED PRESS - U.S. - Print Headline: "High Court Won't Hear Challenge to NY School Vaccine Rules"

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 10 October 2015
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 10 October 2015
UN: Polio vaccines in Ukraine safe despite local concerns
The World Health Organization says it's worried that millions of doses of polio vaccine might be wasted in Ukraine after a patient group raised concerns that the doses are unsafe.
Maria Cheng and Katherine Jacobsen | AP | Foreign | Oct 8, 2015

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

Support is also provided by a growing list of individuals who use this membership service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.

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