



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

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

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

Comments and suggestions should be directed to

David R. Curry, MS

Editor and

Executive Director

Center for Vaccine Ethics & Policy

david.r.curry@centerforvaccineethicsandpolicy.org

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

Support this knowledge-sharing service: *Your financial support helps us cover our costs and to address a current shortfall in our annual operating budget. Click [here](#) to donate and thank you in advance for your contribution.*

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

A. [Milestones](#)

B. [Zika; Ebola/EVD; Polio; MERS-Cov; Yellow Fever](#)

C [WHO; CDC](#)

D. [Announcements//Perspectives](#)

E. [Reports/Research/Analysis](#)

E. [Journal Watch](#)

F. [Media Watch](#)

.....
.....

Milestones/Emergencies

PAHO: [As Haiti Assesses Hurricane Damage, PAHO's Emergency Response Targets Cholera](#)

Washington, October 7, 2016 (PAHO/WHO)—The Pan American Health Organization (PAHO) expects an important upsurge in cholera cases in Haiti after Hurricane Matthew, given the context of flooding and the storm's impact on water and sanitation infrastructure, which is still being assessed after Hurricane Matthew struck Haiti...

...In a briefing to the Global Alert and Response Network today, Dr. Sylvain Aldighieri of PAHO's Program on Health Emergencies said "We expect at least three geographic clusters of cholera outbreaks in the Southwest, in the Artibonite basin, and in the North," based on mathematical modeling of rainfall, water patterns, displaced populations, and environmental and other factors. These are being used to help PAHO guide surveillance and interventions in treatment, water and sanitation to reduce the toll of cholera, he said.

"Water and sanitary conditions are expected to worsen due to the effects of Hurricane Matthew. Efforts were already being directed to control the current epidemic of cholera and the high levels of vector-borne and water-borne diseases, but there is a limited capacity to respond to those challenges. There is now an urgent need to significantly expand the response to prevent a surge of cholera cases and save lives," said Dr. Ciro Ugarte, who heads PAHO's Program on Health Emergencies...

[Editor's Note: No mention of OCV in press release]

.....

[USAID & Partners Announce \\$6 Billion to Expand Fight Against Neglected Tropical Diseases](#)

September 30, 2016

WASHINGTON - The U.S. Agency for International Development (USAID) today announced new partnerships to help countries eliminate and control neglected tropical diseases (NTDs). Over the next five years new and expanded partnerships will provide 1.3 billion treatments, leverage \$6 billion in donated drugs, and prevent more than 585 million people from needing treatment for NTDs.

Over the next five years, USAID and its partners have committed to eliminating Trachoma, the world's leading cause of preventable blindness, by treating at-risk communities and supporting surgeries for affected individuals. USAID will also combat and seek to eliminate Lymphatic Filariasis, a painful and disfiguring parasitic infection transmitted by mosquitos. In addition, USAID will promote improved sanitation to break the transmission of diseases like Schistosomiasis, caused by a painful abdominal parasite.

One in seven people worldwide, a billion people, suffer from a group of parasitic and bacterial infections that can cause profound pain, suffering, stunting, malnutrition, and disability, perpetuating the cycle of poverty. These neglected tropical diseases have endured because of indifference. But many of these diseases can be eliminated with sanitation, preventive treatments, and mass drug distribution campaigns.

"Here's the good news: we can make NTDs a thing of the past," said Gayle Smith, USAID Administrator. "Working together with our partners over the past ten years, we have figured out

an approach that works and freed over a hundred million people from these parasitic worms and bacterial infections that have held communities back for too long. Now is the time to double down and reach scale."...

.....

Commentary

The early years: silent emergency or unique opportunity?

:: Dr. Margaret Chan, Director-General of WHO

:: Anthony Lake, Executive Director, UNICEF

:: Keith Hansen, Vice President for Human Development, World Bank Group

5 October 2016

Today's children will drive growth and development in the societies of tomorrow. We should be deeply concerned, therefore, that an estimated 250 million children (43%) younger than 5 years in low-income and middle-income countries are at risk of falling short of their potential because of adversities they face in their early, formative years.¹

Helping these children reach that potential by investing in early childhood development—and developing their physical, cognitive, emotional, and social capacities—will benefit not only them but also all of us. Failing to make such investments will have profound implications for children, their families, and their societies, exacerbating inequalities and deepening societal divisions. When it comes to early childhood development, the cost of inaction is high.

The papers published in the Lancet Series, *Advancing Early Childhood Development: from Science to Scale*,^{1, 2, 3} quantify that cost, showing that children who are not nurtured properly in the early years may forfeit a quarter of their earning capacity as adults. The Series provides a roadmap to successful interventions in early childhood, along with evidence that such interventions contribute directly to ending extreme poverty, boosting shared prosperity, promoting healthy lives and learning, reducing inequalities, and maintaining peaceful societies.

New evidence is presented in the Series to support the concept of nurturing care as a basic right of every child, on the basis of the scientific advancements underscoring the importance of the early years.² Thanks to those advancements, we know more than ever before about what works in early childhood when brain development is at its peak. All indications are that we must reach families from—or even before—the time of conception, and that support is vital in the first 1000 days of a child's life. The evidence shows that young children have the best chance of maximising their potential when they are well nourished, responsively cared for, with learning opportunities from birth onwards, and protected from disease, violence, and stress.^{1, 2, 3}

The Series introduces evidence, as well, that successful policies for early childhood development focus on equipping families with the time, resources, knowledge, and skills they need to provide nurturing care.³ And it emphasises the importance of well-coordinated efforts across sectors, including health, nutrition, education, welfare, social protection, environmental safety and conservation, agriculture, and water and sanitation.

But although we know what has to be done in the early years, our challenge is to provide the necessary resources and opportunities for the most disadvantaged young children and their

families. Only with accessible support and services can we accelerate progress for the more than four in ten children worldwide who are seriously limited in accessing what they need for healthy growth, learning, and development.^{1, 3}

By advocating for interventions throughout the life course—starting with maternal health and prenatal care—we and our partners can make a positive difference in early childhood policies and programmes. If we succeed, more young children around the world will be able to survive and thrive, becoming developmentally ready to reap the full benefits of education when they reach school age.

We, therefore, have committed to making early childhood investments, policies, and programmes an essential part of our support to the countries in which we operate. To that end, we will work to create a continuum of care during the early years by engaging all relevant sectors. And we will help governments develop or strengthen national strategies and action plans aimed at giving every young child a fair chance to thrive. The UN Secretary-General's Global Strategy for Women's, Children's and Adolescents' Health 2016–2030 provides a foundation for such an intersectoral approach.⁴

The early childhood agenda is truly global, because the need is not limited to low-income countries. Children living in disadvantaged households in middle-income and wealthy countries are also at risk. In targeting our investments, we should give priority to populations in the greatest need, such as families and children in extreme poverty and those who require humanitarian assistance. In addition, we have to build more resilient systems in vulnerable communities to mitigate the disruptive influence of natural disasters, fragility, conflict, and violence.⁵

Working together, we can help countries generate synergies and cost savings from well designed, integrated packages of early childhood services. But we must also continue learning from experience to strengthen the quality of programmes focused on the early years. Rigorous research into the delivery of interventions, and their short-term and long-term outcomes, is important for innovation. We need stronger measurement and a new consensus on robust, valid indicators to assess children's cognitive and socioemotional development. Intensified monitoring through nationwide population-based assessments, such as the Multiple Indicator Cluster Survey, among others, is essential for accountability and will help us stay the course.

Advancing early childhood development in this way will require the deliberate allocation of resources and coordination across countries and regions. Partnerships will, therefore, be key to our success. The Early Childhood Development Action Network, launched in April, 2016, is an important one.⁶ It brings together stakeholders from the public and private sectors, civil society, academia, professional associations, foundations, donor agencies, and local communities. The new network complements existing partnerships, providing a platform for joint advocacy, learning, action, measurement, and accountability.

We will also keep working to protect and invest in young children through the Global Financing Facility for the UN Secretary-General's Every Woman Every Child initiative, as well as alliances such as the Early Learning Partnership, the Global Partnership to End Violence Against Children, Scaling Up Nutrition, and the Power of Nutrition.

Global financing facility
Early Learning Partnership (World Bank)
End Violence Against Children
Scaling Up Nutrition
Power of Nutrition

Ultimately, no matter what platforms or partnerships we use to get there, reaching children in the early years is a prerequisite for sustainable development. This Lancet Series shows why that is true, and points the way towards giving all young children the care and support they need to reach their potential. It is up to all of us to bring that aspiration closer to reality.

[See associated research in Reports section below]

.....
.....

Zika virus [to 8 October 2016]
Public Health Emergency of International Concern (PHEIC)
<http://www.who.int/emergencies/zika-virus/en/>

Zika situation report – 6 October 2016

Full report: <http://apps.who.int/iris/bitstream/10665/250295/1/zikasitrep6Oct16-eng.pdf?ua=1>

Key Updates

:: Countries and territories reporting mosquito-borne Zika virus infections for the first time in the past week:

... None

:: The investigation by the Ministry of Public Health of Thailand confirmed 2 cases of Zika-related microcephaly on 30 September 2016. This is the first time that Zika-related microcephaly cases have been confirmed in Southeast Asia. The mothers reported no travel history to areas outside of Thailand.

:: Countries and territories reporting microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection for the first time in the past week:

... Thailand

:: Countries and territories reporting Guillain-Barré syndrome (GBS) cases associated with Zika virus infection for the first time in the past week:

... None

Analysis

:: Overall, the global risk assessment has not changed.

:: The reporting of 2 locally acquired cases of Zika-related microcephaly in Thailand confirms that this complication may occur in Southeast Asia. Since attempts at genetic sequencing of this virus were unsuccessful, it is not known whether the mothers were infected with a strain of virus related to those previously isolated in Southeast Asia, or if there has instead been transmission of a virus strain imported from the Americas. A programme for active surveillance

of microcephaly was established in February 2016 in Thailand, and is in the process of being integrated into routine arrangements for surveillance of birth defects. If a Zika virus strain previously circulating in Southeast Asia was found to be linked to microcephaly or other complications, it would have significant impact on the global risk assessment, as it would demonstrate that Zika-associated complications are not limited to the "Asian" strain circulating since 2013 in the Western Pacific Region, the Region of the Americas, and Cabo Verde.

:: The risk of Zika-associated complications in countries thought to be endemic for Zika virus remains largely unknown, due both to uncertainty about the risk associated with different Zika strains, and due to uncertainty about population immunity in these endemic settings. To address the latter question, seroprevalence studies are urgently needed.

Information for travellers

Updated 3 October 2016

Zika Open [to 8 October 2016]

[Bulletin of the World Health Organization]

:: *All papers available [here](#)*

No new papers identified.

.....
.....

EBOLA/EVD [to 8 October 2016]

<http://www.who.int/ebola/en/>

"Threat to international peace and security" (UN Security Council)

[Editor's Note:

We note that the Ebola tab - which had been listed along with Zika, Yellow Fever, MERS CoV and other emergencies - has been removed from the WHO "home page". We deduce that WHO has suspended issuance of new Situation Reports after resuming them for several weekly cycles. The most recent report posted is [EBOLA VIRUS DISEASE – Situation Report - 10 JUNE 2016](#). We have not encountered any UN Security Council action changing its 2014 designation of Ebola as a "threat to international peace and security." We will continue to highlight key articles and other developments around Ebola in this space.

.....
.....

POLIO [to 8 October 2016]

Public Health Emergency of International Concern (PHEIC)

Polio this week as of 4 October 2016

:: The new Global Polio Eradication Initiative web site has been launched! The site features a new design, allowing visitors to see the latest information on the programme, interactive data visualizations and media content including photo essays and videos. All resources from the previous website is available on the new site as well.

:: Explore the new design and organization of the GPEI web site: [Polio Today](#) contains the latest case counts, a history of polio, facts on the virus and prevention, and information on preparing for a polio-free world through transition planning and the endgame strategy. [Who We Are](#) contains our mission statement, strategy, information about the key partners of the program, and official reports released by the programme's governing bodies. [Where We Work](#) provides detailed information on the endemic, outbreak, at-risk, and polio-free countries; funding-related updates will be included in the [Financing](#) section; [News](#) will house all media content, including the monthly newsletter ([Polio News](#)). [More](#)

:: The annual [Global Citizen Festival](#) saw pledges of support from Prime Ministers Justin Trudeau of [Canada](#), Xavier Bettel of [Luxembourg](#) and Joseph Muscat of [Malta](#) to ensure a polio-free world to future generations.

:: [Selected Country Updates](#) as of 28 Sep 2016 [excerpts]

[Pakistan](#)

:: Two new WPV1 positive environmental samples were reported in the past week, from Pichin, Balochistan (collected on 3 September) and Jacobabad, Sindh (collected on 16 August). Of note: Pichin began environmental surveillance in August; since then, three of the four collected samples tested positive for WPV1 (results from the fourth sample are pending).

:: Continued detection of positive environmental samples throughout 2016 confirms that virus transmission continues to be geographically widespread across the country, despite strong improvements being achieved

Disease outbreak news

[Wild polio and vaccine derived polio in Nigeria](#)

6 October 2016

Wild polio virus (WPV1) outbreak

After more than two years without the detection of wild polio in Nigeria, the Government reported three laboratory confirmed wild poliovirus type one (WPV1) cases with onset between July and August 2016.

All three cases were detected from Borno State, in children between 2 and 5 years of age. Two of them developed acute flaccid paralysis (AFP) while one was asymptomatic, identified as a close contact of a child with AFP.

The detected viruses are closely linked to WPV1 last detected in Borno in 2011. This is an indication that this virus strain has been circulating without detection since that time.

Vaccine derived polio cases

In addition to the wild polio cases reported, a vaccine-derived poliovirus type 2 (cVDPV2) has also been detected in specimens collected from a healthy household contact of one of the WPV1 cases recently reported as part of strengthened disease surveillance activities being implemented in the area.

The genetic analysis of the isolated strain indicates that also this cVDPV2 strain has been circulating in the area for at least two years without prior detection.

Public Health Response

A regional outbreak response in north-eastern Nigeria continues to be implemented, in response to the detected wild and vaccine derived polio virus.

Large-scale supplementary immunization activities are currently being implemented. In response to detection of polio in Borno, the government of Nigeria has declared the outbreak to be a national public health emergency; and the neighbouring governments of Cameroon, Central African Republic, Chad and Niger declared a regional public health emergency for the Lake Chad sub-region.

Regional outbreak response is being coordinated across all countries, and within the context of the broader humanitarian emergency affecting parts of the region. Polio eradication teams on the ground, at national, regional and global levels, are closely coordinating with humanitarian emergency response teams, other United Nation organizations and Non-Governmental Organizations, to maximise the impact of all available resources and ensure that polio vaccine can be delivered alongside broader health interventions to the most vulnerable and at-need populations in the region. Surveillance activities are strengthened across the region...

[See Journal Watch for abstracts]

PLOS Medicine

<http://www.plosmedicine.org/>

(Accessed 8 October 2016)

Perspective

[Sailing in Uncharted Waters: Carefully Navigating the Polio Endgame](#)

Elizabeth Miller, T. Jacob John

| published 04 Oct 2016 PLOS Medicine

<http://dx.doi.org/10.1371/journal.pmed.1002141>

Research Article

[Population Immunity against Serotype-2 Poliomyelitis Leading up to the Global Withdrawal of the Oral Poliovirus Vaccine: Spatio-temporal Modelling of Surveillance Data](#)

Margarita Pons-Salort, Natalie A. Molodecky, Kathleen M. O'Reilly, Mufti Zubair Wadood, Rana M. Safdar, Andrew Etsano, Rui Gama Vaz, Hamid Jafari, Nicholas C. Grassly, Isobel M. Blake

| published 04 Oct 2016 PLOS Medicine

.....
.....

Yellow Fever [to 8 October 2016]

<http://www.who.int/emergencies/yellow-fever/en/>

[Yellow fever situation report](#)

7 October 2016

[Read the full situation report](#)

Key updates

Angola epidemiological update (as of 22 September):

:: The last confirmed case had symptom onset on 23 June.
:: 32 probable cases were reported in the last 4 weeks
:: Phase II of the vaccination campaign was postponed due to logistical challenges but was rescheduled to begin the second week of October. The target population consists of 2 million people in 12 districts in 9 provinces.

Democratic Republic of the Congo epidemiological update (as of 18 September):

:: The last confirmed non-sylvatic case had symptom onset on 12 July.
:: 7 cases are under investigation (3 in Kinshasa and 1 case each in Bas Uele, Kwilu, Sud Ubangi and Tshuapa provinces).
:: The reactive vaccination campaign in Feshi and Mushenge Health Zones in Kwango province began on 2 and 6 October, respectively.

Analysis

:: The continuing detection and investigation of suspected and laboratory-positive cases (including the 32 probable cases in Angola) demonstrate that active surveillance is ongoing. Nevertheless, it is important to note persistent difficulties in surveillance and laboratory confirmation capacities, which may delay case detection. A strong and sustained surveillance effort remains crucial.

:: The status of the probable cases in Angola will be reviewed by the Ministry of Health's Final Classification Committee once the investigations are completed as to their exposure history and yellow fever vaccination status.

.....
.....

MERS-CoV [to 8 October 2016]

<http://www.who.int/emergencies/mers-cov/en/>

No new content identified.

.....
.....

WHO & Regional Offices [to 8 October 2016]

Highlights

[Responding to the health needs of internally displaced persons in Nigeria](#)

October 2016 – In response to the critical health needs of internally displaced persons in Borno state, WHO through the State Ministry of Health has delivered emergency medical supplies to Mafa and Dikwa IDP camps. These are 2 of the 15 areas liberated this year and host more than 75 000 internally displaced persons.

[Making it easier to quit smoking in India with mobile technology](#)

September 2016 – Approximately 2 million people in India are receiving support to quit tobacco through a programme called mTobaccoCessation. Developed by the government of

India, WHO, and the International Telecommunication Union, the programme provides tailored advice and support via daily and weekly SMS messages.

[Weekly Epidemiological Record, 7 October 2016](#), vol. 91, 40 (pp. 461–468) Contents
461 Real-time monitoring of vaccination campaign performance using mobile phones – Nepal, 2016

[GIN September 2016 pdf, 1.87Mb](#)

3 October 2016

[Request for a Proposal for editing services, ICP pdf, 79kb](#)

3 October 2016

Deadline for application: 16 October 2016

:: WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

:: WHO Regional Director for Africa, Dr Matshidiso Moeti urges for more people to be able to do psychological first aid during emergencies in the African Region

Brazzaville, 7 October 2016 - The WHO Regional Director for Africa, Dr Matshidiso Moeti, is urging countries in the African Region to train more people to be able to perform psychological first aid during emergencies. Her message comes as a critical call on the occasion of the World Mental Health Day commemorated under the theme: "Psychological First AID."

WHO Region of the Americas PAHO

:: As Haiti Assesses Hurricane Damage, PAHO's Emergency Response Targets Cholera
(10/07/2016)

WHO South-East Asia Region SEARO

No new, unique announcements identified.

WHO European Region EURO

:: Supporting emergency response in Aleppo from Gaziantep, Turkey 06-10-2016

:: Prime Minister of Latvia expresses support to increase public financing for health 03-10-2016

WHO Eastern Mediterranean Region EMRO

:: Regional Committee discusses public health achievements

5 October 2016 – During the first day of the Regional Committee meeting, WHO's Regional Director Dr Ala Alwan presented his annual report on the work of WHO in the Eastern Mediterranean Region in 2015 and into 2016 to ministers of health and senior level policy-makers attending the 63rd Session of the Regional Committee in Cairo, Egypt.

:: Dr Fikri from United Arab Emirates nominated as WHO Regional Director 6 October 2016

:: Medical supplies air-lifted to Al-Qamishli, Syria 3 October 2016

WHO Western Pacific Region

:: Asia-Pacific countries call for stronger action on environment and health
MANILA, 8 October 2016 – Countries from Bhutan to the Cook Islands today pledged to redouble efforts to jointly tackle the pressing issues of climate change, air pollution, safe water, sanitation and hazardous chemicals in pursuit of health and sustainable development.

[Read the joint news release](#)

.....
.....

CDC/ACIP [to 8 October 2016]

<http://www.cdc.gov/media/index.html>

<https://www.cdc.gov/vaccines/acip/>

Thursday, October 6, 2016

[CDC funds 34 innovative projects to combat antibiotic resistance - Press Release](#) -

[MMWR Weekly October 7, 2016 / No. 39](#)

:: [Vaccination Coverage Among Children in Kindergarten — United States, 2015–16 School Year](#)

:: [Vaccination Coverage Among Children Aged 19–35 Months — United States, 2015](#)

:: [Real-Time Monitoring of Vaccination Campaign Performance Using Mobile Phones — Nepal, 2016](#)

:: [Update: Interim Guidance for Preconception Counseling and Prevention of Sexual Transmission of Zika Virus for Persons with Possible Zika Virus Exposure — United States, September 2016](#)

:: [Characteristics of Children Aged <18 Years with Zika Virus Disease Acquired Postnatally — U.S. States, January 2015–July 2016](#)

:: [Notice to Readers: Update to Reporting of Pneumonia and Influenza Mortality](#)

:: [QuickStats: Percentage of Children Aged 1–5 Years with Elevated Blood Lead Levels, by Race/Ethnicity — National Health and Nutrition Examination Survey, United States, 1988–1994, 1999–2006, and 2007–2014](#)

.....
.....

Announcements/Perspectives

Gavi [to 8 October 2016]

<http://www.gavi.org/library/news/press-releases/>

05 October 2016

[Gavi welcomes contribution of US\\$ 25 million from the Kingdom of Saudi Arabia](#)

Investment will help Vaccine Alliance partners save children's lives through immunisation in Yemen.

Riyadh, 5 October 2016 – The Kingdom of Saudi Arabia has agreed to contribute US\$ 25 million to support childhood immunisation programs through Gavi, the Vaccine Alliance. The multi-year pledge from the Kingdom of Saudi Arabia will contribute towards efforts to immunise children and [support health system strengthening in Yemen](#).

“The Kingdom of Saudi Arabia is a key partner in global health and development and this pledge underlines the country’s unwavering commitment in these areas,” said H. E. Dr. Ngozi

Okonjo-Iweala, Chair of the Gavi Board. "Through the contribution of donors such as the Kingdom of Saudi Arabia we are able to continue support immunisation programs and strengthen health systems in Yemen, and ensure a healthy future for children today and for generations to come. I would like to thank the Custodian of the Two Holy Mosques King Salman Bin Abdul Aziz, the Saudi government and the Saudi people for this generous support."...

... Yemen has been in the grip of a severe political crisis since 2011 descending into a major armed conflict. Despite serious challenges faced by the country's already-fragile health systems, Yemen managed to sustain its routine immunization coverage in 2015. Thanks to Gavi funding and support from Alliance partners, such as UNICEF and WHO, 67% of children in Yemen received a full course of the five-in-one pentavalent vaccine in 2015. Gavi will continue to support pentavalent, pneumococcal, rotavirus and inactivated polio vaccine programmes as well as health system strengthening in Yemen between 2016 and 2020...

Gavi at the UNGA: diary of a public-private sector partnership

28 September 2016

A week at the United Nations General Assembly is a long time in global health, especially for Gavi. The annual New York event brings together most members of the Vaccine Alliance– UN agencies, donor governments, implementing countries, businesses, philanthropies and civil society - and this diary records Gavi's day-by-day efforts to strengthen collaboration and build new partnerships.

.....

IAVI – International AIDS Vaccine Initiative [to 8 October 2016]

<https://www.iavi.org/>

October 3, 2016

IAVI Awarded Grants to Expedite AIDS Vaccine Development

NEW YORK – The International AIDS Vaccine Initiative (IAVI) has recently been awarded two new grants by the Bill & Melinda Gates Foundation to expedite the development of promising AIDS vaccine candidates and other new biomedical HIV prevention tools. The grants provide for funding in an amount of almost US\$60M over three and a half years.

Under these awards, IAVI will provide extended services in pre-clinical development, regulatory affairs, data analysis, project management, quality assurance, manufacturing and clinical-trial implementation to a broad range of investigators through the Collaboration for AIDS Vaccine Discovery (CAVD) to expedite the development of around a dozen promising AIDS vaccine candidates or biologics toward clinical testing.

"Accelerating the translation of innovative research into promising vaccine candidates for clinical testing is a real urgency. With more than 2 million people becoming infected with HIV in 2015 alone there is no time to lose. Collaborative and efficient AIDS vaccine development today means more lives saved in the future," says Mark Feinberg, President and CEO of IAVI. "We are very pleased to expand the provision of vaccine product development expertise to support Gates Foundation-sponsored AIDS vaccine programs. The Gates Foundation has been a long-standing partner in this critical work of IAVI."

The new awards build on initial awards granted in 2013 to establish key product development services at IAVI for the CAVD with an original slate of three to five proposed pilot projects. However, the support rapidly expanded to a current total of 17 projects...

.....

GHIT Fund [to 1 October 2016]

<https://www.ghitfund.org/>

GHIT was set up in 2012 with the aim of developing new tools to tackle infectious diseases that devastate the world's poorest people. Other funders include six Japanese pharmaceutical companies, the Japanese Government and the Bill & Melinda Gates Foundation.

2016.10.05 Press Room

[GHIT Fund Steps Up Battle Against Neglected Diseases With Continued Investments to Move Promising Research Through the Pipeline](#)

Investments include ongoing funding for a single-dose antimalarial that is one of GHIT Fund's most advanced programs to-date, as well as new and continued funding for drugs and vaccines to combat malaria, tuberculosis and dengue...

.....

[WHO to Add \\$20m in Industry Fees to Keep Prequalification Program Sustainable](#)

[RAPS](#) | 30 September 2016

The World Health Organization (WHO), industry groups and other partners on Friday announced a new financing arrangement that will add \$20 million annually in new industry fees to ensure the financial sustainability and quality of WHO's prequalification program.

.....

EDCTP [to 8 October 2016]

<http://www.edctp.org/>

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

3 October 2016

[Dr Leonardo Santos Simão and Professor Marcel Tanner appointed as EDCTP High Representatives](#)

Dr Leonardo Santos Simão, a former Minister of Health and Minister of Foreign Affairs and Cooperation of Mozambique, has been appointed as the EDCTP High Representative South with special focus on Africa. Professor Marcel Tanner, former Director of the Swiss Tropical and Public Health Institute, has been appointed as the EDCTP High Representative North with special focus on Europe.

The High Representatives will act as goodwill ambassadors for EDCTP in order to increase the visibility of the programme and promote partnerships with other EDCTP stakeholders in the fight against poverty-related and neglected diseases in Africa, Europe and globally...

.....

FDA [to 8 October 2016]

<http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm>

[What's New for Biologics](#)

:: October 7, 2016 Approval Letter - GARDASIL 9 (PDF - 47KB)

Posted: 10/7/2016

: Application History

Updated: 10/6/2016

:: Influenza Virus Vaccine for the 2016-2017 Season

Updated: 10/06/2016

.....

European Medicines Agency [to 8 October 2016]

<http://www.ema.europa.eu/>

07/10/2016

EMA Management Board: highlights of October 2016 meeting

Board elects Grzegorz Cessak as vice-chair, adopts Agency's mid-year report and signs off reflection paper on European medicines web portal

.....

Industry Watch [to 8 October 2016]

:: **First Dengue Vaccine Approved in More than 10 Countries**

:: Recent approvals for Dengvaxia® granted by health authorities in Indonesia, Thailand and Singapore -

:: First dengue vaccine continues to get growing support from regional and national medical societies -

Lyon, October 4, 2016 - Sanofi Pasteur, the vaccines global business unit of Sanofi, announced today that Dengvaxia® dengue vaccine has now received its 11th marketing approval, four of which granted from Regulatory Authorities recognized by the World Health Organization (WHO). To date the vaccine is approved in Mexico, The Philippines, Brazil, El Salvador, Costa Rica, Paraguay, Guatemala, Peru, Indonesia, Thailand and Singapore.

The vaccine is also receiving endorsements from key medical societies at national and regional level. Notably, the Latin American Society for Pediatric Infectious Diseases (SLIPE for Sociedad Latino Americana de Infectología Pediátrica) just published its support for dengue vaccination. National medical societies in Indonesia, Brazil and Mexico have recently also recommended vaccination with Dengvaxia®. These recommendations are consistent with the World Health Organization position paper issued on July 29th recommending that countries with high burden of disease should consider introduction of Dengvaxia® as part of an integrated dengue management program.¹

"We're pleased to see the growing medical and public health recognition for the vaccine," notes Su Peing Ng, MD, Head of Global Medical Affairs for Sanofi Pasteur. "With this new tool in hand, public health communities in dengue-endemic countries now have additional means to achieve the WHO objectives for 50% reduction in mortality and 25% reduction in morbidity due to dengue by 2020."...

:: **IDRI Receives NIH Grant To Develop RNA-Based Zika Virus Vaccine**

SEATTLE, Oct. 6, 2016 /PRNewswire-USNewswire/ -- As Zika cases continue to rise around the world -- and in the United States -- with associated increases in Guillain-Barre syndrome and congenital birth defects, the need for a safe and effective vaccine to protect against Zika virus is greater than ever. IDRI (Infectious Disease Research Institute) has been awarded a

\$491,000, two-year grant from the National Institute of Allergy and Infectious Diseases, part of the National Institutes of Health, to rapidly develop a novel, safe and effective Zika vaccine by designing and formulating new RNA-based vaccine candidates....

:: **Engility Wins \$10 Million Task Order to Combat Chikungunya Virus**

Medical work supports Walter Reed Army Institute of Research

October 06, 2016

CHANTILLY, Va.--(BUSINESS WIRE)--Engility Holdings, Inc. (NYSE:EGL), today announced it was awarded a \$10 million task order by the Walter Reed Army Institute of Research to conduct clinical trials for vaccines to combat the mosquito-borne Chikungunya virus. The task order was awarded under the \$900 million indefinite delivery/indefinite quantity (IDIQ) medical product research and development (MPRD) contract for the U.S. Army Medical Research and Materiel Command...

.....
.....

AERAS [to 8 October 2016]

<http://www.aeras.org/pressreleases>

No new digest content identified.

BMGF - Gates Foundation [to 8 October 2016]

<http://www.gatesfoundation.org/Media-Center/Press-Releases>

No new digest content identified.

Coalition for Epidemic Preparedness Innovations (CEPI) [to 8 October 2016]

<http://cepi.net/>

No new digest content identified.

European Vaccine Initiative [to 8 October 2016]

<http://www.euvaccine.eu/news-events>

No new digest content identified.

Fondation Merieux [to 8 October 2016]

<http://www.fondation-merieux.org/news>

Mission: Contribute to global health by strengthening local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.

Global Fund [to 8 October 2016]

<http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=>

No new digest content identified.

Hilleman Laboratories [to 8 October 2016]

<http://www.hillemanlabs.org/>

No new digest content identified

Human Vaccines Project [to 8 October 2016]

<http://www.humanvaccinesproject.org/media/press-releases/>

No new digest content identified

NIH [to 8 October 2016]

<http://www.nih.gov/news-events/news-releases>

No new digest content identified

PATH [to 8 October 2016]

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

No new digest content identified

UNICEF [to 17 September 2016]

http://www.unicef.org/media/media_89711.html

No new digest content identified

* * * *

Reports/Research/Analysis/Commentary/Conferences/Meetings/Book Watch/Tenders

Vaccines and Global Health: The Week in Review has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health, health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

Investing in early childhood development essential to helping more children and communities thrive, new Lancet Series finds

Joint News release -

UNICEF/WHO/World Bank

249 million children under five are at risk of not reaching developmental potential, implementing low-cost interventions could reverse this trend

5 October 2016 | WASHINGTON, D.C. - An estimated 43 percent—249 million—of children under five in low-and middle-income countries (LMICs) are at an elevated risk of poor development due to extreme poverty and stunting, according to findings from The Lancet's new Series, *Advancing Early Childhood Development: from Science to Scale*.

The Series reveals that early childhood development interventions that promote nurturing care—health, nutrition, responsive caregiving, security and safety, and early learning—may cost as little as 50 cents per child per year, when combined with existing services such as health. WHO, the World Bank, and UNICEF contributed to and offered guidance to the Series.

The findings in this Series underscore the importance of increased global commitment to early childhood development. Individuals are estimated to suffer a loss of about a quarter of average adult income per year, while countries may forfeit up to as much as two times their current GDP expenditures on health or education. Consequences of inaction impact not only present but future generations.

"We now know how high the cost of inaction is, and new evidence makes clear that the time to act is now. We hope the evidence in this Series will help countries reach more pregnant women and young children with preventive and promotive services that have the potential to drastically improve developmental outcomes for children as well as their adult health, wellbeing, and economic productivity," said Series co-author, Professor Linda M. Richter, PhD, DST-NRF Centre of Excellence in Human Development, University of the Witwatersrand, Johannesburg, South Africa.

Research shows that a child's brain develops faster in the first 2-3 years than at any other time in life. These early years are also a critical period of adaptability and responsiveness to interventions. When young children are deprived of nutrition, stimulation, and protection, the damaging effects can produce long-term detriments for families and communities.

"The science and economics are clearly on the side of investing in the first 1,000 days of a child's life, starting with a woman's pregnancy," said Keith Hansen, Vice President, Human Development at the World Bank Group. "If we don't do this, children fall behind long before they set foot in school and suffer a lifetime of disadvantage. But if we do, we can make an irrevocable difference to their ability to fully participate in the economies of tomorrow as active, productive citizens. The Lancet research is further proof, if more is needed, of just how important this agenda is."

The authors stress the strong position of the health sector in providing an entry point for early childhood interventions—especially in support of nurturing care. The sector's ability to access women and children during the critical period from conception through early childhood presents an opportunity to integrate low-cost interventions, such as WHO / UNICEF's Care for Child Development, and Reach Up and Learn, into existing maternal and child health and nutrition services. These have shown to help improve the quality of nurturing care and the overall development of young children, while also giving attention to the wellbeing of the caregiver.

"The science shows us that biology is not destiny—and that what children experience in the earliest days and years of life shapes and defines their futures," said UNICEF Executive Director Anthony Lake. "We need to turn that science into an alarm bell—because the development of millions of children is at urgent risk. Right now, 43 percent of children in low- and middle-income countries are at risk of not achieving their cognitive potential. No country can risk losing nearly half of the brain potential of its youngest citizens—low- and middle-income countries least of all."

According to the Series authors, interventions need to be available early. "Historically, early childhood interventions have focused on children of preschool age. But we now know that interventions encompassing the period before conception through the first two years of life can greatly reduce adverse growth and health outcomes, and help ensure young children reach their full developmental potential," said Series co-author, Professor Stephen Lye, PhD, Executive Director, Fraser Mustard Institute for Human Development, University of Toronto, ON, Canada.

The authors propose several ways the global community can scale-up support for early childhood development services by:

:: Encouraging the adoption and implementation of policies to create supportive environments for families to provide nurturing care for young children,

- :: Building capacity and strengthening coordination to promote early childhood development through existing health, nutrition, education, social, and child protection services,
- :: Strengthening measurement and ensuring accountability for early childhood development services,
- :: Increasing research, and fostering global and regional leadership and action, and
- :: Expanding political will and funding through advocacy for the Sustainable Development Goals (SDGs).

"Investing in young children is a moral, economic, and social imperative. The SDGs have provided a promising vision on children and adolescents' health, but political will and increased investment in early childhood development are needed to ensure that the ambitious targets can be reached. Early childhood development will not only benefit the children of today, but will have a direct impact on the stability and prosperity of nations in the future," said Dr Margaret Chan, WHO Director-General.

Ending Extreme Poverty: A Focus on Children

Briefing Note

World Bank Group and UNICEF

October 2016 : 6 pages

Pdf: http://www.unicef.org/publications/index_92826.html#

Ending Extreme Poverty: A Focus on Children – a briefing note from the World Bank Group and UNICEF – finds that children in developing countries are more than twice as likely as adults to live in extreme poverty. The briefing note finds that in 2013, 19.5 per cent of children in 89 countries were living in households that survived on an average of US\$1.90 a day per person or less, compared to just 9.2 per cent of adults. Globally, almost 385 million children were living in extreme poverty.

Press Release

Nearly 385 million children living in extreme poverty, says joint World Bank Group – UNICEF study

NEW YORK, 3 October 2016 – Children are more than twice as likely as adults to live in extreme poverty, according to a new analysis from the World Bank Group and UNICEF. *Ending Extreme Poverty: A Focus on Children* finds that in 2013 19.5 per cent of children in developing countries were living in households that survived on an average of US\$1.90 a day or less per person, compared to just 9.2 per cent of adults. Globally, almost 385 million children were living in extreme poverty.

Children are disproportionately affected, as they make up around a third of the population studied, but half of the extreme poor. The youngest children are the most at risk – with more than one-fifth of children under the age of five in the developing world living in extremely poor households.

"Children are not only more likely to be living in extreme poverty; the effects of poverty are most damaging to children. They are the worst off of the worst off – and the youngest children are the worst off of all, because the deprivations they suffer affect the development of their bodies and their minds," said UNICEF Executive Director Anthony Lake. "It is shocking that half of all children in sub-Saharan Africa and one in five children in developing countries are growing up in extreme poverty. This not only limits their futures, it drags down their societies." ...

"The sheer number of children in extreme poverty points to a real need to invest specifically in the early years—in services such as pre-natal care for pregnant mothers, early childhood

development programs, quality schooling, clean water, good sanitation, and universal health care,” said Ana Revenga, Senior Director, Poverty and Equity at the World Bank Group. “Improving these services, and ensuring that today’s children can access quality job opportunities when the time comes, is the only way to break the cycle of intergenerational poverty that is so widespread today.”

The global estimate of extreme child poverty is based on data from 89 countries, representing 83 per cent of the developing world’s population.

Sub-Saharan Africa has both the highest rates of children living in extreme poverty at just under 50 per cent, and the largest share of the world’s extremely poor children, at just over 50 per cent. South Asia has the second highest share at nearly 36 per cent—with over 30 per cent of extremely poor children living in India alone. More than four out of five children in extreme poverty live in rural areas...

UNICEF and the World Bank Group are calling on governments to:

- :: Routinely measure child poverty at the national and subnational level and focus on children in national poverty reduction plans as part of efforts to end extreme poverty by 2030.

- :: Strengthen child-sensitive social protection systems, including cash transfer programs that directly help poor families to pay for food, health care, education and other services that protect children from the impact of poverty and improve their chances of breaking the cycle in their own lives.

- :: Prioritize investments in education, health, clean water, sanitation and infrastructure that benefit the poorest children, as well as those that help prevent people from falling back into poverty after setbacks like droughts, disease or economic instability.

- :: Shape policy decisions so that economic growth benefits the poorest children.

UNICEF and the World Bank Group are working with partners to interrupt cycles of poverty and to promote early childhood development - with programs ranging from cash transfers, to nutrition, healthcare and education.

* * * *

Journal Watch

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

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

American Journal of Infection Control

October 2016 Volume 44, Issue 10, p1083-1196, e167-e182

<http://www.ajicjournal.org/current>

[Reviewed earlier]

American Journal of Preventive Medicine

October 2016 Volume 51, Issue 4, p411-636, e91-e118

<http://www.ajpmonline.org/current>

[Reviewed earlier]

American Journal of Public Health

Volume 106, Issue 10 (October 2016)

<http://ajph.aphapublications.org/toc/ajph/current>

[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

October 2016; 95 (4)

<http://www.ajtmh.org/content/current>

Perspective Piece

Licensed Dengue Vaccine: Public Health Conundrum and Scientific Challenge

Scott B. Halstead

Am J Trop Med Hyg 2016 95:741-745; Published online June 27, 2016, doi:10.4269/ajtmh.16-0222

Abstract

A tetravalent live attenuated vaccine composed of chimeras of yellow fever 17D and the four dengue viruses (chimeric yellow fever dengue [CYD]) manufactured by Sanofi Pasteur has completed phase III clinical testing in over 35,000 children 2–16 years of age. The vaccine was recently licensed in four countries. During the first 2 years of observation, CYD vaccine efficacy ranged between 30% and 79% in 10 different countries with an overall efficacy of 56.8%. During year 3, there was an overall efficacy against hospitalization of 16.7%, but a relative risk of hospitalization of 1.6 among children younger than 9 years and 4.95 in children 5 years of age and younger. Vaccination of seronegative children resulted in universal broad dengue neutralizing antibody responses, but poor protection against breakthrough dengue cases. Unless proven otherwise, such breakthrough cases in vaccinated subjects should be regarded as vaccine antibody-enhanced (ADE). The provenance of these cases can be studied serologically using original antigenic sin immune responses in convalescent sera. In conventional dengue vaccine efficacy clinical trials, persons vaccinated as seronegatives may be hospitalized with breakthrough ADE infections, whereas in the placebo group, dengue infection of monotypic immunes results in hospitalization. Vaccine efficacy trial design must identify dengue disease etiology by separately measuring efficacy in seronegatives and seropositives. The reason(s) why CYD vaccine failed to raise protective dengue virus immunity are unknown. To achieve a safe and protective dengue vaccine, careful studies of monotypic CYD vaccines in humans should precede field trials of tetravalent formulations.

Annals of Internal Medicine

4 October 2016, Vol. 165. No. 7

<http://annals.org/issue.aspx>

[New issue; No relevant content identified]

BMC Cost Effectiveness and Resource Allocation

<http://resource-allocation.biomedcentral.com/>

(Accessed 8 October 2016)

[No new content]

BMC Health Services Research

<http://www.biomedcentral.com/bmchealthservres/content>

(Accessed 1 October 2016)

Research article

[Achieving universal health coverage in South Africa through a district health system approach: conflicting ideologies of health care provision](#)

Universal Health Coverage (UHC) has emerged as a major goal for health care delivery in the post-2015 development agenda. It is viewed as a solution to health care needs in low and middle countries with growin...

Adam Fusheini and John Eyles

BMC Health Services Research 2016 16:558

Published on: 7 October 2016

Research article

[The impact of reimbursement systems on equity in access and quality of primary care: A systematic literature review](#)

Reimbursement systems provide incentives to health care providers and may drive physician behaviour. This review assesses the impact of reimbursement system on socioeconomic and racial inequalities in access, ...

Wenjing Tao, Janne Agerholm and Bo Burström

BMC Health Services Research 2016 16:542

Published on: 4 October 2016

Research article

[Enhancing health care equity with Indigenous populations: evidence-based strategies from an ethnographic study](#)

Structural violence shapes the health of Indigenous peoples globally, and is deeply embedded in history, individual and institutional racism, and inequitable social policies and practices. Many Indigenous comm...

Annette J. Browne, Colleen Varcoe, Josée Lavoie, Victoria Smye, Sabrina T. Wong, Murry Krause, David Tu, Olive Godwin, Koushambhi Khan and Alycia Fridkin

BMC Health Services Research 2016 16:544

Published on: 4 October 2016

BMC Infectious Diseases

<http://www.biomedcentral.com/bmcinfectdis/content>

(Accessed 1 October 2016)

Research article

[Impact of mass-screening on tuberculosis incidence in a prospective cohort of Brazilian prisoners](#)

Globally, prison inmates are a high-risk population for tuberculosis (TB), but the specific drivers of disease and impact of mass screening interventions are poorly understood.

Dayse Sanchez Guimarães Paião, Everton Ferreira Lemos, Andrea da Silva Santos Carbone, Renata Viebrantz Enne Sgarbi, Alexandre Laranjeira Junior, Fellipe Matos da Silva, Letícia Marques Brandão, Luciana Squarizi dos Santos, Vaneli Silva Martins, Simone Simionatto, Ana Rita Coimbra Motta-Castro, Maurício Antônio Pompílio, Juliana Urrego, Albert Icksang Ko, Jason Randolph Andrews and Julio Croda

BMC Infectious Diseases 2016 16:533

Published on: 3 October 2016

BMC Medical Ethics

<http://www.biomedcentral.com/bmcmedethics/content>

(Accessed 8 October 2016)

[No new relevant content]

BMC Pregnancy and Childbirth

<http://www.biomedcentral.com/bmcpregnancychildbirth/content>

(Accessed 1 October 2016)

[No new relevant content]

BMC Public Health

<http://bmcpublichealth.biomedcentral.com/articles>

(Accessed 8 October 2016)

Research article

[Remaining missed opportunities of child survival in Peru: modelling mortality impact of universal and equitable coverage of proven interventions](#)

Peru has made great improvements in reducing stunting and child mortality in the past decade, and has reached the Millennium Development Goals 1 and 4. The remaining challenges or missed opportunities for chil...

Yvonne Tam, Luis Huicho, Carlos A. Huayanay-Espinoza and María Clara Restrepo-Méndez

BMC Public Health 2016 16:1048

Published on: 4 October 2016

BMC Research Notes

<http://www.biomedcentral.com/bmcresnotes/content>

(Accessed 8 October 2016)

[No new relevant content]

BMJ Open

2016, Volume 6, Issue 10

<http://bmjopen.bmj.com/content/current>

Protocol

Systematic review protocol assessing the processes for linking clinical trial registries and their published results

Rabia Bashir,
Adam G Dunn

BMJ Open 2016;6:e013048 doi:10.1136/bmjopen-2016-013048

Abstract

Introduction Clinical trial registries are an important source of information for tracking clinical trials from their inception through to their reporting, and have been used to measure publication bias and outcome reporting bias. Our aim is to survey and quantify the processes that have been used to identify links between clinical trial registries and published trial reports in studies that rely on these links to evaluate the completeness and accuracy of trial reporting.

Methods and analysis We will identify studies that describe a process for identifying the links between a trial registry included in the WHO International Clinical Trial Registry Platform and published trial results, and use those links to evaluate the completeness and accuracy of trial reporting. Information extracted from the studies will include the purpose and application domain of the study, registries used or searched, processes by which the links were identified, the study period and proportions for which links were found. We will summarise what is known about the number and availability of links between clinical trial registries and published results, and examine how automatic linking, inference and inquiry processes have been used to identify links since the introduction of trial registries.

Ethics and dissemination The systematic review is focused on the analysis of secondary data and does not require ethics approval. The results of the systematic review will be used to inform standard processes used to identify links to and from clinical trial registries in studies that evaluate the completeness and accuracy of clinical trial reports, as well as systematic reviews. Our findings will be disseminated by publishing the systematic review in a peer-reviewed journal, and by engaging with stakeholders from clinical trial registries and bibliographic databases.

Bulletin of the World Health Organization

Volume 94, Number 10, October 2016, 709-784

<http://www.who.int/bulletin/volumes/94/10/en/>

[Reviewed earlier]

Child Care, Health and Development

September 2016 Volume 42, Issue 5 Pages 603–773

<http://onlinelibrary.wiley.com/doi/10.1111/cch.v42.5/issuetoc>

[Reviewed earlier]

Clinical Therapeutics

October 2016 Volume 38, Issue 10, Supplement, e1-e32

[http://www.clinicaltherapeutics.com/issue/S0149-2918\(16\)X0014-8](http://www.clinicaltherapeutics.com/issue/S0149-2918(16)X0014-8)

[Reviewed earlier]

Complexity

September/October 2016 Volume 21, Issue S1 Pages 1–632
<http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.6/issuetoc>
[Reviewed earlier]

Conflict and Health

<http://www.conflictandhealth.com/>
[Accessed 8 October 2016]
[No relevant content identified]

Contemporary Clinical Trials

Volume 50, In Progress (September 2016)
<http://www.sciencedirect.com/science/journal/15517144/50>
[Reviewed earlier]

Current Opinion in Infectious Diseases

October 2016 - Volume 29 - Issue 5 pp: v-vi,433-537
<http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx>
[Reviewed earlier]

Developing World Bioethics

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

Development in Practice

Volume 24, Number 8
<http://www.developmentinpractice.org/journals/volume-24-number-8>
[Reviewed earlier]

Disasters

October 2016 Volume 40, Issue 4 Pages 589–815
<http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-4/issuetoc>
[Reviewed earlier]

Emerging Infectious Diseases

Volume 22, Number 10—October 2016
<http://wwwnc.cdc.gov/eid/>
[Reviewed earlier]

Epidemics

Volume 17, In Progress (December 2016)
<http://www.sciencedirect.com/science/journal/17554365>

Regular Articles

Clustering of contacts relevant to the spread of infectious disease

Original Research Article

Pages 1-9

Xiong Xiao, Albert Jan van Hoek, Michael G. Kenward, Alessia Melegaro, Mark Jit

Abstract

Objective

Infectious disease spread depends on contact rates between infectious and susceptible individuals. Transmission models are commonly informed using empirically collected contact data, but the relevance of different contact types to transmission is still not well understood. Some studies select contacts based on a single characteristic such as proximity (physical/non-physical), location, duration or frequency. This study aimed to explore whether clusters of contacts similar to each other across multiple characteristics could better explain disease transmission.

Methods

Individual contact data from the POLYMOD survey in Poland, Great Britain, Belgium, Finland and Italy were grouped into clusters by the k medoids clustering algorithm with a Manhattan distance metric to stratify contacts using all four characteristics. Contact clusters were then used to fit a transmission model to sero-epidemiological data for varicella-zoster virus (VZV) in each country.

Results and discussion

Across the five countries, 9–15 clusters were found to optimise both quality of clustering (measured using average silhouette width) and quality of fit (measured using several information criteria). Of these, 2–3 clusters were most relevant to VZV transmission, characterised by (i) 1–2 clusters of age-assortative contacts in schools, (ii) a cluster of less age-assortative contacts in non-school settings. Quality of fit was similar to using contacts stratified by a single characteristic, providing validation that single stratifications are appropriate. However, using clustering to stratify contacts using multiple characteristics provided insight into the structures underlying infection transmission, particularly the role of age-assortative contacts, involving school age children, for VZV transmission between households

Epidemiology and Infection

Volume 144 - Issue 12 - September 2016

<http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue>

[Reviewed earlier]

The European Journal of Public Health

Volume 26, Issue 4, 1 August 2016

<http://eurpub.oxfordjournals.org/content/26/4>

[Reviewed earlier]

Eurosurveillance

Volume 21, Issue 40, 06 October 2016

<http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678>
[New issue; No relevant content identified]

Global Health: Science and Practice (GHSP)

September 2016 | Volume 4 | Issue 3
<http://www.ghspjournal.org/content/current>
[Reviewed earlier]

Global Public Health

Volume 11, Issue 9, 2016
<http://www.tandfonline.com/toc/rqph20/current>
[Reviewed earlier]

Globalization and Health

<http://www.globalizationandhealth.com/>
[Accessed 1 October 2016]

Research

[Do countries rely on the World Health Organization for translating research findings into clinical guidelines? A case study](#)

Ramadhani A. Noor, Pascal Geldsetzer, Till Bärnighausen and Wafaie Fawzi

Globalization and Health 2016 12:58

Published on: 6 October 2016

Abstract

Background

The World Health Organization's (WHO) antiretroviral therapy (ART) guidelines have generally been adopted rapidly and with high fidelity by countries in sub-Saharan Africa. Thus far, however, WHO has not published specific guidance on nutritional care and support for (non-pregnant) adults living with HIV despite a solid evidence base for some interventions. This offers an opportunity for a case study on whether national clinical guidelines in sub-Saharan Africa provide concrete recommendations in the face of limited guidance by WHO. This study, therefore, aims to determine if national HIV treatment guidelines in sub-Saharan Africa contain specific guidance on nutritional care and support for non-pregnant adults living with HIV.

Methods

We identified the most recent national HIV treatment guidelines in sub-Saharan African countries with English as an official language. Using pre-specified criteria, we determined for each guideline whether it provides guidance to clinicians on each of five components of nutritional care and support for adults living with HIV: assessment of nutritional status, dietary counseling, micronutrient supplementation, ready-to-use therapeutic or supplementary foods, and food subsidies.

Results

We found that national HIV treatment guidelines in sub-Saharan Africa generally do not contain concrete recommendations on nutritional care and support for non-pregnant adults living with HIV.

Conclusions

Given that decisions on nutritional care and support are inevitably being made at the clinician-patient level, and that clinicians have a relative disadvantage in systematically identifying, summarizing, and weighing up research evidence compared to WHO and national governments, there is a need for more specific clinical guidance. In our view, such guidance should at a minimum recommend daily micronutrient supplements for adults living with HIV who are in pre-ART stages, regular dietary counseling, periodic assessment of anthropometric status, and additional nutritional management of undernourished patients. More broadly, our findings suggest that countries in sub-Saharan Africa look to WHO for guidance in translating evidence into clinical guidelines. It is, thus, likely that the development of concrete recommendations by WHO on nutritional interventions for people living with HIV would lead to more specific guidelines at the country-level and, ultimately, better clinical decisions and treatment outcomes.

Health Affairs

September 2016; Volume 35, Issue 9

<http://content.healthaffairs.org/content/current>

Issue Focus: Payment Reforms, Prescription Drugs & More

[Reviewed earlier]

Health and Human Rights

Volume 18, Issue 1, June 2016

<http://www.hhrjournal.org/>

Special Section: Tuberculosis and the Right to Health

in collaboration with the International Human Rights Clinic, University of Chicago Law School

[Reviewed earlier]

Health Economics, Policy and Law

Volume 11 - Issue 4 - October 2016

<https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue>

[New issue; No new relevant content]

Health Policy and Planning

Volume 31 Issue 9 November 2016

<http://heapol.oxfordjournals.org/content/current>

Original Articles

[Investigating the remuneration of health workers in the DR Congo: implications for the health workforce and the health system in a fragile setting](#)

Maria Paola Bertone, Grégoire Lurton, and Paulin Beya Mutombo, John E. Ataguba, Kenneth O. Ojo, and Hyacinth E. Ichoku

Health Policy Plan. (2016) 31 (9): 1143-1151 doi:10.1093/heapol/czv131

Original Articles

[Explaining socio-economic inequalities in immunization coverage in Nigeria](#)

Health Policy Plan. (2016) 31 (9): 1212-1224 doi:10.1093/heapol/czw053

Abstract

Globally, in 2013 over 6 million children younger than 5 years died from either an infectious cause or during the neonatal period. A large proportion of these deaths occurred in developing countries, especially in sub-Saharan Africa. Immunization is one way to reduce childhood morbidity and deaths. In Nigeria, however, although immunization is provided without a charge at public facilities, coverage remains low and deaths from vaccine preventable diseases are high. This article seeks to assess inequalities in full and partial immunization coverage in Nigeria. It also assesses inequality in the 'intensity' of immunization coverage and it explains the factors that account for disparities in child immunization coverage in the country. Using nationally representative data, this article shows that disparities exist in the coverage of immunization to the advantage of the rich. Also, factors such as mother's literacy, region and location of the child, and socio-economic status explain the disparities in immunization coverage in Nigeria. Apart from addressing these issues, the article notes the importance of addressing other social determinants of health to reduce the disparities in immunization coverage in the country. These should be in line with the social values of communities so as to ensure acceptability and compliance. We argue that any policy that addresses these issues will likely reduce disparities in immunization coverage and put Nigeria on the road to sustainable development.

Reviews

Opening the 'black box' of performance-based financing in low- and lower middle-income countries: a review of the literature

Dimitri Renmans, Nathalie Holvoet, Christopher Garimoi Orach, and Bart Criel
Health Policy Plan. (2016) 31 (9): 1297-1309 doi:10.1093/heapol/czw04

Abstract

Although performance-based financing (PBF) receives increasing attention in the literature, a lot remains unknown about the exact mechanisms triggered by PBF arrangements. This article aims to summarize current knowledge on how PBF works, set out what still needs to be investigated and formulate recommendations for researchers and policymakers from donor and recipient countries alike. Drawing on an extensive systematic literature review of peer-reviewed journals, we analysed 35 relevant articles. To guide us through this variety of studies, point out relevant issues and structure findings, we use a comprehensive analytical framework based on eight dimensions. The review inter alia indicates that PBF is generally welcomed by the main actors (patients, health workers and health managers), yet what PBF actually entails is less straightforward. More research is needed on the exact mechanisms through which not only incentives but also ancillary components operate. This knowledge is essential if we really want to appreciate the effectiveness, desirability and appropriate format of PBF as one of the possible answers to the challenges in the health sector of low-and lower middle-income countries. A clear definition of the research constructs is a primordial starting point for such research.

Methodological Musings

Sparking, supporting and steering change: grounding an accountability framework with viewpoints from Nigerian routine immunization and primary health care government officials

Asha S. George, Daniel J Erchick, Mustafa Mahmud Zubairu, Inuwa Yau Barau, and Chizoba Wonodi

Health Policy Plan. (2016) 31 (9): 1326-1332 doi:10.1093/heapol/czw057

Abstract

Existing accountability efforts in Nigeria primarily serve as retrospective policing. To enable accountability to guide change prospectively and preemptively, we drew from a literature review to develop a framework that highlights mutually reinforcing dimensions of accountability in health systems along three counterbalancing axes. The axis of power sparks change by wielding 'sticks' that curb the potential abuse of power, but also by offering 'carrots' that motivate constructive agency. The axis of ability supports change by enabling service delivery actors with formal rules that appropriately expand their authority to act, but also the informal norms and inputs for improved performance. Last, the axis of justice orients the strategic direction of change, balancing political representation, community ownership and social equity, so that accountability measures are progressive, rather than being captured by self-interests. We consulted Nigerian government officials to understand their viewpoints on accountability and mapped their responses to our evolving framework. All government officials (n = 36) participating in three zonal workshops on routine immunization filled out questionnaires that listed the top three opportunities and challenges to strengthening accountability. Thematically coded responses highlighted dimensions of accountability within the axes of ability and power: clarifying formal roles and responsibilities; transparency, data and monitoring systems; availability of skilled health personnel that are motivated and supervised; addressing informal norms and behaviours; and availability of inputs regarding funding and supplies. Other dimensions of accountability were mentioned but were not as critical from their viewpoints: managerial discretion; sanctions and enforcements; political influence and community engagement. Strikingly, almost no respondents mentioned social equity as being an important aspect of accountability, although a few mentioned broad development concerns that reflected community perspectives. Reframing accountability as a means of sparking, supporting and steering change can highlight different dimensions of health systems that need reform, particularly depending on the positionality of the viewpoints consulted.

Health Research Policy and Systems

<http://www.health-policy-systems.com/content>

[Accessed 8 October 2016]

[No new relevant content]

Humanitarian Exchange Magazine

Number 67 September 2016

<http://odihpn.org/magazine/humanitarian-innovation/>

[***Refugees and vulnerable migrants in Europe***](#)

[Reviewed earlier]

Infectious Agents and Cancer

<http://www.infectagentscancer.com/content>

[Accessed 8 October 2016]

[No new content]

Infectious Diseases of Poverty

<http://www.idpjournals.com/content>

[Accessed 8 October 2016]

Research Article

Lessons on malaria control in the ethnic minority regions in Northern Myanmar along the China border, 2007–2014

For many countries where malaria is endemic, the burden of malaria is high in border regions. In ethnic minority areas along the Myanmar-China border, residents have poor access to medical care for diagnosis a...

Ru-Bo Wang, Jia-Qiang Dong, Zhi-Gui Xia, Tao Cai, Qing-Feng Zhang, Yao Zhang, Yang-Hui Tian, Xiao-Ying Sun, Guang-Yun Zhang, Qing-Pu Li, Xiao-Yu Xu, Jia-Yin Li and Jun Zhang
Infectious Diseases of Poverty 2016 5:95

Published on: 6 October 2016

International Health

Volume 8 Issue 5 September 2016

<http://inthealth.oxfordjournals.org/content/current>

[Reviewed earlier]

International Journal of Epidemiology

Volume 45 Issue 3 June 2016

<http://ije.oxfordjournals.org/content/current>

[Reviewed earlier]

International Journal of Infectious Diseases

September 2016 Volume 50, p1-90 Open Access

<http://www.ijidonline.com/current>

[Reviewed earlier]

JAMA

October 4, 2016, Vol 316, No. 13, Pages 1329-1420

<http://jama.jamanetwork.com/issue.aspx>

Viewpoint

Toward a New Era of Trust and Transparency in Clinical Trials

Kathy L. Hudson, PhD; Michael S. Lauer, MD; Francis S. Collins, MD, PhD

JAMA. 2016;316(13):1353-1354. doi:10.1001/jama.2016.14668

This Viewpoint from the National Institutes of Health describes a new set of guidelines for the conduct and registration of clinical trials in the United States.

Abstract

Clinical trials are the most publicly visible component of the biomedical research enterprise, from the potential human application of novel laboratory findings to the generation of robust evidence about treatments or preventive interventions in routine clinical care. These trials are also the point at which biomedical research most directly engages human participants—dedicated volunteers who trust investigators to uphold the highest standards of scientific rigor and ethical oversight. While clinical trials have evolved and improved over time—producing impressive advances in diagnosis, treatment, and prevention—there are still major challenges.

Therefore, fundamental changes are needed to reflect science and society's movement to increase efficiency, accountability, and transparency in clinical research.

JAMA Pediatrics

October 1, 2016, Vol 170, No. 10, Pages 919-1032

<http://archpedi.jamanetwork.com/issue.aspx>

Viewpoint

The Globally Synchronized Switch—Another Milestone Toward Achieving Polio Eradication

Steven G. F. Wassilak, MD; John F. Vertefeuille, PhD; Rebecca M. Martin, PhD

JAMA Pediatr. 2016;170(10):927-928. doi:10.1001/jamapediatrics.2016.1718

This Viewpoint discusses the global effort to synchronize transition from trivalent to bivalent oral polio vaccine as a crucial component of the effort to eradicate polio.

Abstract

To avoid the risks for vaccine-associated paralytic polio¹ and circulating vaccine-derived poliovirus (cVDPV) outbreaks,² the Polio Eradication and Endgame Strategic Plan³ 2013-2018 directs the phasing out of all oral poliovirus vaccine (OPV) use after wild poliovirus (WPV) is eradicated. This has started with the type 2 component in the vaccine. From April 17 through May 1, 2016, 155 countries using trivalent OPV (tOPV) (Sabin strains of types 1, 2, and 3) in their national immunization schedules removed it and introduced bivalent OPV (bOPV) (Sabin strains of types 1 and 3).³ This massive public health event required the engagement of every health facility providing vaccines in each of these countries. This unprecedented, synchronized vaccine introduction and withdrawal is termed the switch.^{4,5}...

Viewpoint

Developing Policy When Evidence Is Lacking

David Rubin, MD, MSCE

JAMA Pediatr. 2016;170(10):929-930. doi:10.1001/jamapediatrics.2016.1945

This Viewpoint discusses how the Commission to Eliminate Child Abuse and Neglect Fatalities developed policy recommendations in the absence of trial data, relying strongly on aggregate testimony from communities.

Abstract

Bridging research to policy can be a noble but daunting task. We all hope that the body of research we develop, if disseminated well, will inform policies for children. We often confront barriers to this, such as incongruence of research and policy time frames, misalignment of stakeholders, and disagreement on goals of objectives, but what does one do when the gravity of an issue requires an urgent policy response but the quality of evidence is lacking? Such was my experience as a White House appointee on the Commission to Eliminate Child Abuse and Neglect Fatalities. The commission, created through the Protect Our Kids Act of 2012, was charged to develop a national strategy for reducing child abuse fatalities. After visiting state officials, community leaders, and families across the country over 2 years, the commission concluded that an innovative cross-sector public health approach was needed. However, arriving at that conclusion was not simple.¹

Journal of Community Health

Volume 41, Issue 5, October 2016

<http://link.springer.com/journal/10900/41/5/page/1>
[Reviewed earlier]

Journal of Epidemiology & Community Health

October 2016, Volume 70, Issue 10

<http://jech.bmj.com/content/current>

[Reviewed earlier]

Journal of Global Ethics

Volume 12, Issue 2, 2016

<http://www.tandfonline.com/toc/rjge20/current>

[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

July-September 2016 Volume 8 | Issue 3 Page Nos. 95-126

<http://www.jgid.org/currentissue.asp?sabs=n>

[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)

Volume 27, Number 3, August 2016

<https://muse.jhu.edu/issue/33980>

[Reviewed earlier]

Journal of Immigrant and Minority Health

Volume 18, Issue 5, October 2016

<http://link.springer.com/journal/10903/18/5/page/1>

[Reviewed earlier]

Journal of Immigrant & Refugee Studies

Volume 14, Issue 3, 2016

<http://www.tandfonline.com/toc/wimm20/current>

Special Issue: Social Mobilization and Political Participation in the Diaspora During the "Arab Spring"

[Reviewed earlier]

Journal of Infectious Diseases

Volume 214 Issue 8 October 15, 2016

<http://jid.oxfordjournals.org/content/current>

[New issue; No relevant digest content identified]

The Journal of Law, Medicine & Ethics

Winter 2015 Volume 43, Issue 4 Pages 673–913

<http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-4/issuetoc>

Special Issue: SYMPOSIUM: Harmonizing Privacy Laws to Enable International Biobank Research: Part I

[14 articles]

[Reviewed earlier]

Journal of Medical Ethics

October 2016, Volume 42, Issue 10

<http://jme.bmj.com/content/current>

[Reviewed earlier]

Journal of Medical Internet Research

Vol 18, No 10 (2016): October

<http://www.jmir.org/2016/10>

[New issue; No relevant content identified]

Journal of Medical Microbiology

Volume 65, Issue 9, September 2016

<http://jmm.microbiologyresearch.org/content/journal/jmm/65/8;jsessionid=8n8h02en4abqh.x-sgm-live-02>

[New issue; No relevant content identified]

Journal of Patient-Centered Research and Reviews

Volume 3, Issue 3 (2016)

<http://digitalrepository.auorahealthcare.org/jpcrr/>

[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 5 Issue 8 October 2016

<http://jpids.oxfordjournals.org/content/current>

[Reviewed earlier]

Journal of Pediatrics

September 2016 Volume 176, p1-228

<http://www.jpeds.com/current>

[Reviewed earlier]

Journal of Public Health Policy

Volume 37, Issue 1 Supplement, September 2016

<http://link.springer.com/journal/41271/37/1/suppl/page/1>
[Reviewed earlier]

Journal of the Royal Society – Interface

01 June 2016; volume 13, issue 119
<http://rsif.royalsocietypublishing.org/content/current>
[Reviewed earlier]

Journal of Virology

September 2016, volume 90, issue 18
<http://jvi.asm.org/content/current>
[New issue; No relevant digest content identified]

The Lancet

Oct 08, 2016 Volume 388 Number 10053 p1447-1850 e11
<http://www.thelancet.com/journals/lancet/issue/current>
Comment

Longer lives and unfinished agendas on child survival

Kevin Watkins

Summary

The Global Burden of Disease Study 2015 (GBD 2015) is a landmark event.^{1, 2, 3, 4, 5, 6, 7} Building on the earlier GBD studies it provides a detailed snapshot of the state of global health and an analytic approach to tracking this dynamic picture. As the international community embarks on the transition from the Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs), GBD 2015 is a critical part of the toolkit for measuring progress and—critically—holding governments to account.

Special Report

Measuring progress towards the SDGs—a new vital science

John Maurice

A new statistical methodology has emerged to gauge progress towards reaching the 2030 deadline of the UN's Sustainable Development Goals. John Maurice reports.

With 193 member states to serve, the UN system can hardly be simple. Witness the 17 Sustainable Development Goals (SDGs), which, after more than 2 years of negotiations, the UN launched in 2015 and which came with a complement of 169 targets to be met by 2030 and 231 indicators for measuring progress in meeting the targets. As one development observer pointed out, “the SDGs and the assessment of their progress...are incredibly complex even for the most astute development and health experts”. In comparison, with only 18 targets and 48 indicators, the eight Millennium Development Goals (MDGs) that preceded the SDGs were child's play.

The complexity of the SDGs has left many members of the global health and development community wondering whether assessing progress towards reaching the SDGs is doable. The work reported in today's Lancet by a team of researchers enlisted by the Institute for Health Metrics and Evaluation (IHME), a global health research centre housed at the University of

Washington in Seattle, WA, USA, shows that the task is doable, at least for most of the health-related indicators chosen by the UN...

Articles

[Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015](#)

GBD 2015 Mortality and Causes of Death Collaborators

1459

Open Access

[Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015](#)

GBD 2015 Disease and Injury Incidence and Prevalence Collaborators

1545

Open Access

[Global, regional, and national disability-adjusted life-years \(DALYs\) for 315 diseases and injuries and healthy life expectancy \(HALE\), 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015](#)

GBD 2015 DALYs and HALE Collaborators

1603

Open Access

[Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015](#)

GBD 2015 Risk Factors Collaborators

1659

Open Access

[Global, regional, national, and selected subnational levels of stillbirths, neonatal, infant, and under-5 mortality, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015](#)

GBD 2015 Child Mortality Collaborators

1725

Open Access

[Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015](#)

GBD 2015 Maternal Mortality Collaborators

1775

Open Access

[Measuring the health-related Sustainable Development Goals in 188 countries: a baseline analysis from the Global Burden of Disease Study 2015](#)

GBD 2015 SDG Collaborators

1813

Open Access

Lancet Global Health

Oct 2016 Volume 4 Number 10 e663-e760

<http://www.thelancet.com/journals/langlo/issue/current>

[Reviewed earlier]

The Lancet Infectious Diseases

Oct 2016 Volume 16 Number 10 p1085-1202 e202-e240

<http://www.thelancet.com/journals/laninf/issue/current>

[Reviewed earlier]

Maternal and Child Health Journal

Volume 20, Issue 10, October 2016

<http://link.springer.com/journal/10995/20/10/page/1>

[New issue; No relevant digest content identified]

Medical Decision Making (MDM)

October 2016; 36 (7)

<http://mdm.sagepub.com/content/current>

[Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy

September 2016 Volume 94, Issue 3 Pages 437–694

<http://onlinelibrary.wiley.com/doi/10.1111/milq.2016.94.issue-3/issuetoc>

[Reviewed earlier]

Nature

Volume 538 Number 7623 pp5-134 6 October 2016

http://www.nature.com/nature/current_issue.html

[New issue; No relevant digest content identified]

Nature Medicine

October 2016, Volume 22 No 10 pp1063-1192

<http://www.nature.com/nm/journal/v22/n10/index.html>

[New issue; No relevant digest content identified]

Nature Reviews Immunology

October 2016 Vol 16 No 10

<http://www.nature.com/nri/journal/v16/n10/index.html>

Review

Sex differences in immune responses

Sabra L. Klein & Katie L. Flanagan

p626 | doi:10.1038/nri.2016.90

In this Review the authors discuss some of the key differences that exist between male and female immune functions. They explain how these differences lead to sex biases in susceptibility to infections, inflammatory diseases and cancer. Moreover, they highlight the urgent need for immunologists to consider these sex differences when designing experiments.

New England Journal of Medicine

October 6, 2016 Vol. 375 No. 14

<http://www.nejm.org/toc/nejm/medical-journal>

Perspective

Vaccine Refusal Revisited — The Limits of Public Health Persuasion and Coercion

J. Colgrove

Many scientific, ethical, and political challenges that physicians and public health officials face today in dealing with vaccine refusal would be familiar to their counterparts of past eras. Their task entails balancing the use of coercive and persuasive approaches.

Original Articles

A Measles Outbreak in an Underimmunized Amish Community in Ohio

P.A. Gastañaduy and Others

Abstract

Background

Although measles was eliminated in the United States in 2000, importations of the virus continue to cause outbreaks. We describe the epidemiologic features of an outbreak of measles that originated from two unvaccinated Amish men in whom measles was incubating at the time of their return to the United States from the Philippines and explore the effect of public health responses on limiting the spread of measles.

Methods

We performed descriptive analyses of data on demographic characteristics, clinical and laboratory evaluations, and vaccination coverage.

Results

From March 24, 2014, through July 23, 2014, a total of 383 outbreak-related cases of measles were reported in nine counties in Ohio. The median age of case patients was 15 years (range, <1 to 53); a total of 178 of the case patients (46%) were female, and 340 (89%) were unvaccinated. Transmission took place primarily within households (68% of cases). The virus strain was genotype D9, which was circulating in the Philippines at the time of the reporting period. Measles–mumps–rubella (MMR) vaccination coverage with at least a single dose was estimated to be 14% in affected Amish households and more than 88% in the general (non-Amish) Ohio community. Containment efforts included isolation of case patients, quarantine of susceptible persons, and administration of the MMR vaccine to more than 10,000 persons. The spread of measles was limited almost exclusively to the Amish community (accounting for 99% of case patients) and affected only approximately 1% of the estimated 32,630 Amish persons in the settlement.

Conclusions

The key epidemiologic features of a measles outbreak in the Amish community in Ohio were transmission primarily within households, the small proportion of Amish people affected, and the large number of people in the Amish community who sought vaccination. As a result of targeted containment efforts, and high baseline coverage in the general community, there was limited spread beyond the Amish community. (Funded by the Ohio Department of Health and the Centers for Disease Control and Prevention.)

Editorials

Measles Elimination — Using Outbreaks to Identify and Close Immunity Gaps

D.N. Durrheim

Review Articles

1365-1371

The Changing Face of Clinical Trials: Data Monitoring Committees — Expect the Unexpected

D.L. DeMets and S.S. Ellenberg

[Initial text]

In the five decades since the completion of the Greenberg Report recommendations in 1967 (which were later published¹), independent groups of experts have monitored the progress of many clinical trials for early definitive evidence of benefit, convincing evidence of harm, or sufficient evidence of no potential benefit to render continuation of the trial to be futile. Such monitoring is motivated primarily by an ethical imperative; for trials of treatments intended to prevent or delay serious outcomes, one would want to stop the trial and make the superior treatment available as soon as the evidence was definitive. The assessment of risk versus benefit throughout the course of the trial requires frequent access to accumulating data on efficacy and safety. To allow investigators and sponsors to manage the trial without bias, as well as to ensure an objective assessment of the accumulating data, independent committees, known as data monitoring committees (DMCs), data and safety monitoring boards, or other aliases,² are established to perform this monitoring function and to make recommendations regarding trial modifications, including early termination, to investigators and sponsors. These committees require multidisciplinary expertise and experience, including knowledge of statistical methods for interim data monitoring; they also pay attention to recruitment progress and the general quality of the trial with respect to adherence to the protocol and completeness of data collection and follow-up...

Pediatrics

October 2016, VOLUME 138 / ISSUE 4

<http://pediatrics.aappublications.org/content/138/4?current-issue=y>

Articles

Researchers', Regulators', and Sponsors' Views on Pediatric Clinical Trials: A Multinational Study

Pathma D. Joseph, Jonathan C. Craig, Allison Tong, Patrina H.Y. Caldwell

Pediatrics Oct 2016, 138 (4) e20161171; DOI: 10.1542/peds.2016-1171

Abstract

BACKGROUND AND OBJECTIVE: The last decade has seen dramatic changes in the regulatory landscape to support more trials involving children, but child-specific challenges and inequitable

conduct across income regions persist. The goal of this study was to describe the attitudes and opinions of stakeholders toward trials in children, to inform additional strategies to promote more high-quality, relevant pediatric trials across the globe.

METHODS: Key informant semi-structured interviews were conducted with stakeholders (researchers, regulators, and sponsors) who were purposively sampled from low- to middle-income countries and high-income countries. The transcripts were thematically analyzed.

RESULTS: Thirty-five stakeholders from 10 countries were interviewed. Five major themes were identified: addressing pervasive inequities (paucity of safety and efficacy data, knowledge disparities, volatile environment, double standards, contextual relevance, market-driven forces, industry sponsorship bias and prohibitive costs); contending with infrastructural barriers (resource constraints, dearth of pediatric trial expertise, and logistical complexities); navigating complex ethical and regulatory frameworks ("draconian" oversight, ambiguous requirements, exploitation, excessive paternalism and precariousness of coercion versus volunteerism); respecting uniqueness of children (pediatric research paradigms, child-appropriate approaches, and family-centered empowerment); and driving evidence-based child health (advocacy, opportunities, treatment access, best practices, and research prioritization).

CONCLUSIONS: Stakeholders acknowledge that changes in the regulatory environment have encouraged more trials in children, but they contend that inequities and political, regulatory, and resource barriers continue to exist. Embedding trials as part of routine clinical care, addressing the unique needs of children, and streamlining regulatory approvals were suggested. Stakeholders recommended increasing international collaboration, establishing centralized trials infrastructure, and aligning research to child health priorities to encourage trials that address global child health care needs.

Protecting Children Through Research

Elizabeth Lowenthal, Alexander G. Fiks

[Initial Text]

Given the relative lack of pediatric clinical trials and the common pediatric use of untested or underinvestigated interventions in care, stakeholders increasingly recognize a need to bolster the trial-informed evidence base both in the United States and abroad. This need is particularly acute in the setting of drug trials. However, despite recent improvements in pediatric participation, children continue to be underrepresented. As explored in the article by Pathma Joseph and colleagues¹ in this month's issue of *Pediatrics*, the problem has multiple causes and trials often fail to include any children or those who might benefit most from treatment. Building on the data presented by Joseph et al,¹ we suggest that, although care must be taken to protect children, the best way to bolster outcomes and protect children is through research, not from research.

Frequently, drugs that are available for adults are not formulated and authorized for children. Medications available for treatment of the >3 million HIV-infected children worldwide are a telling example. Of the 6 regimens recommended for first-line treatment in adults with HIV in the United States, 4 are not currently licensed for use in children <12 years old or weighing <35 kg. The other 2 are not recommended for children <2 years of age. ...

Monthly Feature

Polio Eradication in India: The Lessons Learned

Naveen Thacker, Vipin M. Vashishtha, Deep Thacker

Pediatrics Oct 2016, 138 (4) e20160461; DOI: 10.1542/peds.2016-0461

Ethics Rounds

Should Pediatric Practices Have Policies to Not Care for Children With Vaccine-Hesitant Parents?

Kenneth Alexander, Tomas A. Lacy, Angela L. Myers, John D. Lantos

Pediatrics Oct 2016, 138 (4) e20161597; DOI: 10.1542/peds.2016-1597

Pharmaceutics

Volume 8, Issue 3 (September 2016)

<http://www.mdpi.com/1999-4923/8/3>

[Reviewed earlier]

PharmacoEconomics

Volume 34, Issue 10, October 2016

<http://link.springer.com/journal/40273/34/10/page/1>

[New issue; No relevant digest content identified]

PLOS Currents: Disasters

<http://currents.plos.org/disasters/>

[Accessed 1 October 2016]

[No new content]

PLoS Currents: Outbreaks

<http://currents.plos.org/outbreaks/>

[Accessed 1 October 2016]

[No new relevant content identified]

PLoS Medicine

<http://www.plosmedicine.org/>

(Accessed 8 October 2016)

Perspective

Sailing in Uncharted Waters: Carefully Navigating the Polio Endgame

Elizabeth Miller, T. Jacob John

| published 04 Oct 2016 PLOS Medicine

<http://dx.doi.org/10.1371/journal.pmed.1002141>

Research Article

Population Immunity against Serotype-2 Poliomyelitis Leading up to the Global Withdrawal of the Oral Poliovirus Vaccine: Spatio-temporal Modelling of Surveillance Data

Margarita Pons-Salort, Natalie A. Molodecky, Kathleen M. O'Reilly, Mufti Zubair Wadood, Rana M. Safdar, Andrew Etsano, Rui Gama Vaz, Hamid Jafari, Nicholas C. Grassly, Isobel M. Blake

| published 04 Oct 2016 PLOS Medicine

Abstract

Background

Global withdrawal of serotype-2 oral poliovirus vaccine (OPV2) took place in April 2016. This marked a milestone in global polio eradication and was a public health intervention of unprecedented scale, affecting 155 countries. Achieving high levels of serotype-2 population immunity before OPV2 withdrawal was critical to avoid subsequent outbreaks of serotype-2 vaccine-derived polioviruses (VDPV2s).

Methods and Findings

In August 2015, we estimated vaccine-induced population immunity against serotype-2 poliomyelitis for 1 January 2004–30 June 2015 and produced forecasts for April 2016 by district in Nigeria and Pakistan. Population immunity was estimated from the vaccination histories of children <36 mo old identified with non-polio acute flaccid paralysis (AFP) reported through polio surveillance, information on immunisation activities with different oral poliovirus vaccine (OPV) formulations, and serotype-specific estimates of the efficacy of these OPVs against poliomyelitis. District immunity estimates were spatio-temporally smoothed using a Bayesian hierarchical framework. Coverage estimates for immunisation activities were also obtained, allowing for heterogeneity within and among districts. Forward projections of immunity, based on these estimates and planned immunisation activities, were produced through to April 2016 using a cohort model.

Estimated population immunity was negatively correlated with the probability of VDPV2 poliomyelitis being reported in a district. In Nigeria and Pakistan, declines in immunity during 2008–2009 and 2012–2013, respectively, were associated with outbreaks of VDPV2. Immunity has since improved in both countries as a result of increased use of trivalent OPV, and projections generally indicated sustained or improved immunity in April 2016, such that the majority of districts (99% [95% uncertainty interval 97%–100%] in Nigeria and 84% [95% uncertainty interval 77%–91%] in Pakistan) had >70% population immunity among children <36 mo old. Districts with lower immunity were clustered in northeastern Nigeria and northwestern Pakistan. The accuracy of immunity estimates was limited by the small numbers of non-polio AFP cases in some districts, which was reflected by large uncertainty intervals. Forecasted improvements in immunity for April 2016 were robust to the uncertainty in estimates of baseline immunity (January–June 2015), vaccine coverage, and vaccine efficacy.

Conclusions

Immunity against serotype-2 poliomyelitis was forecasted to improve in April 2016 compared to the first half of 2015 in Nigeria and Pakistan. These analyses informed the endorsement of OPV2 withdrawal in April 2016 by the WHO Strategic Advisory Group of Experts on Immunization.

Author Summary

Why Was This Study Done?

:: The Global Polio Eradication Initiative's strategic plan includes the global withdrawal of all oral poliovirus vaccines (OPVs) because they can result, albeit rarely, in outbreaks of poliomyelitis caused by vaccine-derived poliovirus (VDPV).

:: Serotype-2 OPV (OPV2) was withdrawn from trivalent OPV in all 155 countries using this vaccine in April 2016, as the last naturally occurring case of polio caused by serotype-2 wild poliovirus was reported in 1999.

:: Strategies to minimise the risk of serotype-2 VDPVs during the period leading up to OPV2 withdrawal were required.

What Did the Researchers Do and Find?

:: To assess the risks associated with OPV2 withdrawal, we estimated population immunity against poliomyelitis caused by serotype 2 in children under three years old in eight countries (including the two highest risk countries: Nigeria and Pakistan).

:: We found substantial improvements in serotype-2 population immunity over the last five years in most countries, although immunity in parts of northeastern Nigeria and northwestern Pakistan remained relatively low.

Projections of immunity through April 2016 were used to explore the impact of alternative :: immunisation campaigns including the use of inactivated poliovirus vaccine.

What Do These Findings Mean?

:: An increased number of campaigns with trivalent OPV and IPV led to improvements in serotype-2 immunity, thereby minimising the risk of serotype-2 VDPVs associated with OPV2 withdrawal in April 2016.

:: These immunity estimates and projections were used to support the decision by the World Health Organization Strategic Advisory Group of Experts on Immunization to proceed with OPV2 withdrawal.

PLOS Neglected Tropical Diseases

<http://www.plosntds.org/>

[Accessed 8 October 2016]

Research Article

[Validation of a Rapid Rabies Diagnostic Tool for Field Surveillance in Developing Countries](#)

Monique Léchenne, Kemdongarti Naïssengar, Anthony Lepelletier, Idriss Oumar Alfaroukh, Hervé Bourhy, Jakob Zinsstag, Laurent Dacheux

Research Article | published 05 Oct 2016 PLOS Neglected Tropical Diseases

<http://dx.doi.org/10.1371/journal.pntd.0005010>

Research Article

[Controlling Neglected Tropical Diseases \(NTDs\) in Haiti: Implementation Strategies and Evidence of Their Success](#)

Jean Frantz Lemoine, Anne Marie Desormeaux, Franck Monestime, Carl Renad Fayette, Luccene Desir, Abdel Nasser Direny, Sarah Carciunoiu, Lior Miller, Alaine Knipes, Patrick Lammie, Penelope Smith, Melissa Stockton, Lily Trofimovich, Kalpana Bhandari, Richard Reithinger, Kathryn Crowley, Eric Ottesen, Margaret Baker

| published 05 Oct 2016 PLOS Neglected Tropical Diseases

<http://dx.doi.org/10.1371/journal.pntd.0004954>

PLOS One

<http://www.plosone.org/>

[Accessed 8 October 2016]

[No new relevant content identified]

PLOS Pathogens

<http://journals.plos.org/plospathogens/>

(Accessed 8 October 2016)

Opinion

What Is Stopping the Use of Genetically Modified Insects for Disease Control?

Anusha Panjwani, Anthony Wilson

| published 06 Oct 2016 PLOS Pathogens

<http://dx.doi.org/10.1371/journal.ppat.1005830>

PNAS - Proceedings of the National Academy of Sciences of the United States of America

<http://www.pnas.org/content/early/>

Social Sciences - Social Sciences

Combining natural language processing and network analysis to examine how advocacy organizations stimulate conversation on social media

Christopher Andrew Bail

PNAS 2016 ; published ahead of print September 30, 2016, doi:10.1073/pnas.1607151113)

Significance

Social media provide potent opportunities for advocacy organizations to shape public debates because of the rapidly increasing number of people who frequent such forums each day. However, social scientists have not yet explained why some advocacy organizations create large-scale public debate whereas most others do not. Using automated text analysis and a Facebook application, I found that advocacy organizations are more likely to stimulate conversation if they produce messages that link discursive themes that are usually discussed in isolation from each other. Such messages not only resonate with multiple audiences, but also put such audiences in conversation with each other. This manuscript thereby contributes a theory of public deliberation on social media for the emerging field of computational social science.

Abstract

Social media sites are rapidly becoming one of the most important forums for public deliberation about advocacy issues. However, social scientists have not explained why some advocacy organizations produce social media messages that inspire far-ranging conversation among social media users, whereas the vast majority of them receive little or no attention. I argue that advocacy organizations are more likely to inspire comments from new social media audiences if they create “cultural bridges,” or produce messages that combine conversational themes within an advocacy field that are seldom discussed together. I use natural language processing, network analysis, and a social media application to analyze how cultural bridges shaped public discourse about autism spectrum disorders on Facebook over the course of 1.5 years, controlling for various characteristics of advocacy organizations, their social media audiences, and the broader social context in which they interact. I show that organizations that create substantial cultural bridges provoke 2.52 times more comments about their messages from new social media users than those that do not, controlling for these factors. This study thus offers a theory of cultural messaging and public deliberation and computational techniques for text analysis and application-based survey research.

Prehospital & Disaster Medicine

Volume 31 - Issue 5 - October 2016

<https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue>

[Reviewed earlier]

Preventive Medicine

Volume 90, Pages 1-222 (September 2016)

<http://www.sciencedirect.com/science/journal/00917435/90>

[Reviewed earlier]

Proceedings of the Royal Society B

10 February 2016; volume 283, issue 1824

<http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y>

[Reviewed earlier]

Public Health Ethics

Volume 9 Issue 8 October 2016

<http://phe.oxfordjournals.org/content/current>

[Reviewed earlier]

Public Health Reports

September/October 2016; 131 (5)

<http://phr.sagepub.com/content/current>

[Reviewed earlier]

Qualitative Health Research

October 2016; 26 (12)

<http://qhr.sagepub.com/content/current>

Special Issue: Responses to Care

[New issue; No relevant content identified]

Reproductive Health

<http://www.reproductive-health-journal.com/content>

[Accessed 8 October 2016]

[No new relevant content identified]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)

Recently Published Articles - September

http://www.paho.org/journal/index.php?option=com_content&view=featured&Itemid=101

Thematic Issue on Climate-smart and Sustainable societies in the Americas

Addressing public health vulnerabilities and promoting sustainable adaptation

Risk Analysis

September 2016 Volume 36, Issue 9 Pages 1683–1812

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-9/issuetoc>

Special Issue: Air Pollution Health Risks

[Introduction to Special Issue on Air Pollution Health Risks \(pages 1688–1692\)](#)

D. Warner North

Version of Record online: 27 SEP 2016 | DOI: 10.1111/risa.12707

Risk Management and Healthcare Policy

Volume 9, 2016

<https://www.dovepress.com/risk-management-and-healthcare-policy-archive56>

[Accessed 8 October 2016]

[Reviewed earlier]

Science

07 October 2016 Vol 354, Issue 6308

<http://www.sciencemag.org/current.dtl>

Special Issue - GENES AND ENVIRONMENT

Reviews

[Going global by adapting local: A review of recent human adaptation](#)

By Shaohua Fan, Matthew E. B. Hansen, Yancy Lo, Sarah A. Tishkoff

Science 07 Oct 2016 : 54-59 Restricted Access

[Transgenerational inheritance: Models and mechanisms of non-DNA sequence-based inheritance](#)

By Eric A. Miska, Anne C. Ferguson-Smith

Science 07 Oct 2016 : 59-63 Restricted Access

[Writ large: Genomic dissection of the effect of cellular environment on immune response](#)

By Nir Yosef, Aviv Regev

Science 07 Oct 2016 : 64-68 Restricted Access

[Exposing the exposures responsible for type 2 diabetes and obesity](#)

By Paul W. Franks, Mark I. McCarthy

Science 07 Oct 2016 : 69-73 Restricted Access

Editorial

[Gene-environment interplay](#)

Jeremy Berg

Editor-in-Chief, Science Journals

Science 07 Oct 2016:

Vol. 354, Issue 6308, pp. 15

DOI: 10.1126/science.aal0219

Summary

The advent of increasingly powerful and inexpensive DNA sequencing methods is changing many aspects of genetics research. In particular, human genome sequencing is transforming our understanding of many aspects of human biology and medicine. However, we must be careful to remember that genes alone do not determine our futures—environmental factors and chance also play important roles.

The impact of training informal health care providers in India: A randomized controlled trial

By Jishnu Das, Abhijit Chowdhury, Reshmaan Hussam, Abhijit V. Banerjee

Science 07 Oct 2016 Full Access

Training helped informal providers deliver better care for angina, diarrhea, and asthma.

Editor's Summary

Delivering health care to mystery patients

Many families in developing countries do not have access to medical doctors and instead receive health care from informal providers. Das et al. used “mystery” patients (trained actors) to test whether a 9-month training program improved the quality of care delivered by informal providers in West Bengal (see the Perspective by Powell-Jackson). The patients did not identify themselves to the providers and were not told which providers had participated in the training program. The results of this blinded assessment showed that medical doctors delivered better care than informal providers but that the training program closed much of the gap.

Science Translational Medicine

05 October 2016 Vol 8, Issue 359

<http://stm.sciencemag.org/>

[New issue: No relevant content identified]

Social Science & Medicine

Volume 160, Pages 1-130 (July 2016)

<http://www.sciencedirect.com/science/journal/02779536/160>

[Reviewed earlier]

Tropical Medicine & International Health

October 2016 Volume 21, Issue 10 Pages 1197–1345

<http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-10/issuetoc>

Articles

HIV prevention and care-seeking behaviour among female sex workers in four cities in India, Kenya, Mozambique and South Africa (pages 1293–1303)

Yves Lafort, Ross Greener, Anuradha Roy, Letitia Greener, Wilkister Ombidi, Faustino Lessitala, Hassan Haghparast-Bidgoli, Mags Beksinska, Peter Gichangi, Sushena Reza-Paul, Jenni A. Smit, Matthew Chersich and Wim Delva

Version of Record online: 23 AUG 2016 | DOI: 10.1111/tmi.12761

Doing well while fighting river blindness: the alignment of a corporate drug donation programme with responsibilities to shareholders (pages 1304–1310)

Yolanda Hernando, Kaela Colwell and Brian D. Wright

Abstract

Objective

Using the example of Merck's donations of ivermectin, to show how tax incentives and non-profit collaborators can make corporate largesse consistent with obligations to maximise returns to shareholders.

Methods

We obtained information from publicly available data and estimated Merck's tax deductions according to the US Internal Revenue Code. Reviews of Merck-Kitasato contracts and personal interviews provided additional information regarding key lessons from this collaboration.

Results

Our best estimate of the direct cost to Merck of the ivermectin tablets donated during 2005–2011 is around US\$ 600 million, well below the stated value of US\$ 3.8 billion. Our calculation of tax write-offs reduces the net cost to around US\$ 180 million in that period. Indirect market benefits and effects on goodwill further enhanced the compatibility of Merck's donation programme with the company's profit-maximising objective. The case offers lessons for effective management of collaborations with public and non-profit organisations.

Conclusion

Merck's role in the donation of ivermectin for the treatment of onchocerciasis is widely and justly acknowledged as a prime example of corporate largesse in the public interest. It is nevertheless important to note that several public and non-profit collaborators, and United States taxpayers, played significant roles in increasing Merck's incentives, and indeed ability, to conduct the donation programme that changed so many lives in poor countries, while meeting its responsibilities to shareholders. Overall, the record indicates responsible corporate management of Merck's ivermectin programme and demonstrates the feasibility of socially responsible policies in a manner compatible with obligations to shareholders.

Vaccine

Volume 34, Issue 44, Pages 5209-5390 (17 October 2016)

<http://www.sciencedirect.com/science/journal/0264410X/34/44>

Regular Papers

Brief education to promote maternal influenza vaccine uptake: A randomized controlled trial

Original Research Article

Pages 5243-5250

Valerie Wing Yu Wong, Daniel Yee Tak Fong, Kris Yuet Wan Lok, Janet Yuen Ha Wong, Chu Sing, Alice Yin-yin Choi, Carol Yuet Sheung Yuen, Marie Tarrant

Abstract

Background

Although pregnant women are the highest priority group for seasonal influenza vaccination, maternal influenza vaccination rates remain suboptimal. The purpose of this study was to evaluate the effect of a brief education intervention on maternal influenza vaccine uptake.

Methods

During the 2013–14 and 2014–15 influenza seasons, we recruited 321 pregnant women from the antenatal clinics of 4 out of 8 public hospitals in Hong Kong with obstetric services. Hospitals were geographically dispersed and provided services to pregnant women with variable socioeconomic backgrounds. Participants were randomized to receive either standard antenatal

care or brief one-to-one education. Participants received telephone follow-up at 2 weeks postpartum. The primary study outcome was self-reported receipt of influenza vaccination during pregnancy. The secondary outcomes were the proportion of participants who initiated discussion about influenza vaccination with a health care professional and the proportion of participants who attempted to get vaccinated.

Results

Compared with participants who received standard care, the vaccination rate was higher among participants who received brief education (21.1% vs. 10%; $p = 0.006$). More participants in the education group initiated discussion about influenza vaccination with their HCP (19.9% vs. 13.1%; $p = 0.10$), but the difference was not statistically significant. Of participants who did not receive the influenza vaccine ($n = 271$), 45 attempted to get vaccinated. A significantly higher proportion of participants who attempted to get vaccinated were in the intervention group (82.2% vs. 17.8%; $p < 0.001$). If participants who had attempted vaccination had received the vaccine, vaccination rates would have been substantially higher (44.1% vs. 15%; $p < 0.001$). Twenty-six participants were advised against influenza vaccination by a healthcare professional, including general practitioners, obstetricians, and nurses.

Conclusion

Although brief education was effective in improving vaccination uptake among pregnant women, overall vaccination rates remain suboptimal. Multicomponent approaches, including positive vaccination recommendations by healthcare professionals, are needed to promote maternal influenza vaccination.

Clinical Trial Registration: www.clinicaltrials.gov (NCT01772901).

Use of administrative records to assess pneumococcal conjugate vaccine impact on pediatric meningitis and pneumonia hospitalizations in Rwanda

Original Research Article

Pages 5321-5328

Maurice Gatera, Jeannine Uwimana, Emmanuel Manzi, Fidele Ngabo, Friday Nwaigwe, Bradford D. Gessner, Jennifer C. Moïsi

Abstract

Background

Ongoing surveillance is critical to assessing pneumococcal conjugate vaccine (PCV) impact over time. However, robust prospective studies are difficult to implement in resource-poor settings. We evaluated retrospective use of routinely collected data to estimate PCV impact in Rwanda.

Methods

We collected data from admission registers at five district hospitals on children age <5 years admitted for suspected meningitis and pneumonia during 2002–2012. We obtained clinical and laboratory data on meningitis from sentinel surveillance at the national reference hospital in Kigali. We developed multivariable logistic regression models to estimate PCV effectiveness (VE) against severe pneumonia and probable bacterial meningitis and Poisson models to estimate absolute rate reductions. Haemophilus influenzae type b vaccine was introduced in January 2002, PCV7 in April 2009 and PCV13 in August 2011.

Results

At the district hospitals, the severe pneumonia and suspected meningitis hospitalization rates decreased by 70/100,000 and 11/100,000 children for 2012 compared to baseline, respectively. VE against severe pneumonia calculated from logistic regression was 54% (95% CI 42–63%).

In Kigali, from 2002 to 2012, annual suspected meningitis cases decreased from 170 pre-PCV7 to 40 post-PCV13 and confirmed pneumococcal meningitis cases from 7 to 0. VE against probable bacterial meningitis was 42% (95% CI –4% to 68%).

Conclusion

In a resource-poor African setting, analysis of district hospital admission logbooks and routine sentinel surveillance data produced results consistent with more sophisticated impact studies conducted elsewhere. Our findings support applying this methodology in other settings and confirm the benefits of PCV in Rwanda.

Vaccine: Development and Therapy

<https://www.dovepress.com/vaccine-development-and-therapy-archive111>

(Accessed 8 October 2016)

[No new content]

Vaccines — Open Access Journal

<http://www.mdpi.com/journal/vaccines>

(Accessed 8 October 2016)

[No new content]

Value in Health

September 2016–October 2016 Volume 19, Issue 6, p699-908

<http://www.valueinhealthjournal.com/current>

Themed Section: Incorporating Patient Preferences into Regulatory Decision Making

[A Framework for Incorporating Patient Preferences Regarding Benefits and Risks into Regulatory Assessment of Medical Technologies](#)

Martin Ho, Anindita Saha, K. Kimberly McCleary, Bennett Levitan, Stephanie Christopher, Kristen Zandlo, R. Scott Braithwaite, A. Brett Hauber, on behalf of the Medical Device Innovation Consortium's Patient Centered Benefit-Risk Steering Committee
p746–750

Published in issue: September 2016

Economic Evaluation

[Cost-Effectiveness of Rotavirus Vaccination in France—Accounting for Indirect Protection](#)

Dan Yamin, Katherine E Atkins, Vanessa Remy, Alison P Galvani

p811–819

Published online: July 14, 2016

Abstract

Background

Vaccination against rotavirus has shown great potential for reducing the primary cause of severe childhood gastroenteritis. Previous economic evaluations of rotavirus vaccination in France have not modeled the potential impact of vaccines on disease burden via reduced transmission.

Objective

To determine the cost-effectiveness of the introduction of pentavalent rotavirus vaccination into the French infant vaccination schedule.

Methods

We developed an age-structured model of rotavirus transmission calibrated to 6 years of French gastroenteritis incidence and vaccine clinical trial data. We evaluated the cost-effectiveness of pentavalent rotavirus vaccination considering that 75% of infants would receive the three-dose vaccine course.

Results

Our model predicts that rotavirus vaccination will decrease rotavirus gastroenteritis incidence and associated clinical outcomes in vaccinated and unvaccinated individuals, delay the seasonal peak of infection, and increase the age of infection. From the societal perspective, our base-case scenario predicts that vaccination coverage would be cost-effective at €115 or €135 per vaccine course at €28,500 and €39,500/quality-adjusted life-year (QALY) gained, respectively, and suggests that almost 95% of the financial benefits will be recouped within the first 5 years following vaccination implementation. From the third-party payer perspective, incremental cost-effectiveness ratios ranged from €12,500 to €20,000/QALY, respectively. Our uncertainty analysis suggests that findings were sensitive to various assumptions including the number of hospitalizations, outpatient visits, and the extent of QALY losses per rotavirus episode.

Conclusions

Introducing pentavalent rotavirus vaccination into the French infant vaccination schedule would significantly reduce the burden of rotavirus disease in children, and could be cost-effective under plausible conditions.

Health Policy Analysis

Increasing Patient Involvement in Drug Development

Maria M. Lowe, David A. Blaser, Lisa Cone, Steve Arcona, John Ko, Rahul Sasane, Paul Wicks
p869–878

Published online: May 24, 2016

Open Access

Abstract

Background

To ensure the creation of treatments that maximize value at the lowest cost, all aspects of the health care system need to align with patient needs and preferences. Despite growing efforts to engage patients in research and regulatory activities, the pharmaceutical industry has yet to maximize patient involvement in the drug development process.

Objective

To gain a better understanding of the present state of patient involvement in drug development.

Methods

Through a semistructured interview methodology, we sought to identify opportunities, barriers, and examples of patient involvement in the drug development process. Telephone interviews were conducted with six senior leaders of evidence generation within the pharmaceutical industry and four patients. These interviews were supplemented with interviews with a research funder, a regulator, a patient advocacy group, and a caregiver.

Results

Although our interviewees spoke of the potential benefits of aligning research around the needs of patients, there were few examples they could share to suggest this was occurring at scale. A number of barriers were identified including the added burden associated with adverse event

reporting, concerns about patient representativeness or their ability to participate in drug development conversations, and the costs in time and resources involved relative to returns on investment.

Conclusions

As health care systems continue to evolve and establish patients as the primary stakeholder in their health care decision making, the pharmaceutical industry will need to be innovative to demonstrate the value of their products relative to the outcomes experienced by patients. Pharmaceutical companies should recognize the value of involving patients across the entire product life cycle and work to transform present perceptions and practices throughout their organizations.

*

*

*

*

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

Preventive Medicine

Available online 3 October 2016

In Press, Accepted Manuscript

Dispelling the myth: Exploring associations between the HPV vaccine and inconsistent condom use among college students

C Vázquez-Otero, EL Thompson, EM Daley, S Griner...

Highlights

:: There was no association between HPV vaccination and condom use among college women.
:: Vaginal and anal sex condom use was not associated with HPV vaccination among college men.

:: HPV-vaccinated college men were less likely to report inconsistent condom use for anal sex.

:: HPV vaccination is not associated with risky sexual behavior.

:: Dispelling this myth is important to promote HPV vaccination in the US.

Abstract

Human papillomavirus (HPV) vaccination is safe and effective in preventing anogenital cancers and warts. However, myths have surrounded the HPV vaccine since its approval, including the possibility that HPV vaccinated young people are more likely to engage in risky sexual behaviors. The purpose of this study was to assess the association between HPV vaccination and engaging in inconsistent condom use in a sample of U.S. college students. A secondary data analysis of the National College Health Assessment-II (Fall 2013) was conducted in 2015. Risky sexual activity was operationalized as inconsistent condom use for oral, vaginal or anal sexual activity. Logistic regression models were stratified by sexual activity and gender, and controlled for socio-demographics and history of STIs. Inconsistent condom use was reported among females for vaginal (47%), oral (94%), and anal sex (75%); while males reported levels of inconsistency for vaginal (38%), oral (94%), and anal sex (58%). Sixty-nine percent of females reported receiving the HPV vaccine compared to 43% of males. Among females, there was no significant association between HPV vaccination and inconsistent condom use in any of the sexual activities. Among males there was no significant association between HPV vaccination and inconsistent condom use in oral or vaginal sex. HPV-vaccinated males were less likely to report inconsistent condom use during anal sexual activity. This study contributes to the increasing evidence that HPV vaccination is not associated with risky sexual behavior.

Dispelling this myth is important to facilitate uptake and completion of the HPV vaccine in the U.S.

Journal of Tropical Pediatrics

First published online: October 2, 2016

Review of Naturally Occurring Intussusception in Young Children in the WHO African Region prior to the Era of Rotavirus Vaccine Utilization in the Expanded Programme of Immunization

Evans M. Mpabalwani¹, Jason M. Mwenda², Jacqueline E. Tate³ and Umesh D. Parashar³

Abstract

Rotavirus vaccines, Rotarix and RotaTeq, are increasingly being introduced in national immunization programmes in Africa to prevent severe dehydrating acute gastroenteritis. A low-level risk of intussusception has been associated with rotavirus vaccines. We reviewed published data on intussusception in children <2 years of age in Africa. PubMed electronic database search was used to retrieve papers published on intussusception. The search was further refined to identify surveillance reports and case series conducted from 1980 to 2014, with at least 25 cases. The initial search identified 34 studies, and the refined search yielded 16. Intussusception occurred naturally in infants 2–4 months and peaked around 5–8 months of age. Delayed presentation was common and required surgical intervention in 87% (1008 of 1158) of cases with a high CFR, 10–33.7%. In African children, intussusception has been reported infrequently at a young age when the first dose of rotavirus vaccine is administered.

*

*

*

*

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 8 October 2016

[No new, unique, relevant content]

BBC

<http://www.bbc.co.uk/>

Accessed 8 October 2016

[No new, unique, relevant content]

The Economist

<http://www.economist.com/>

Accessed 8 October 2016

[No new, unique, relevant content]

Financial Times

<http://www.ft.com/home/uk>

Accessed 8 October 2016

[No new, unique, relevant content]

Forbes

<http://www.forbes.com/>

Accessed 8 October 2016

[How To Nudge People Into Getting Their Flu Shots](#)

HBS Working Knowledge, Contributor

5 October 2016

To boost the number of employees taking advantage of free vaccination clinics, companies should think carefully about where to place them, says Harvard behavioral economist John Beshears.

Foreign Affairs

<http://www.foreignaffairs.com/>

Accessed 8 October 2016

[No new, unique, relevant content]

Foreign Policy

<http://foreignpolicy.com/>

Accessed 8 October 2016

[No new, unique, relevant content]

The Guardian

<http://www.guardiannews.com/>

Accessed 8 October 2016

Humanitarian response

[Hurricane Matthew: Haiti needs vaccines to stop deadly cholera spreading](#)

9,000 people died in Haiti's last cholera outbreak. We must act fast in disaster-affected hotspots to help prevent history repeating itself

Dr Anita Zaidi and Helen Matzger

Friday 7 October 2016 16.39 BST

...The UN – which recently acknowledged its role in bringing cholera to Haiti – is working on a cholera response plan in conjunction with the country's Ministry of Health to be presented publically. But if we don't want to repeat past mistakes, we need to jump-start our cholera response today.

Within two days the use of the stockpile could be approved and by next week the vaccine shipped to Haiti – if we act fast the vaccine could be used in Haiti's hurricane-affected cholera hotspots in time to help prevent needless illness and death.

We have an effective tool, and it is the responsibility of the global health community to do everything in our power to get cholera vaccines to Haiti immediately, so that no more families are affected by this unforgiving disease.

We need to do more than plan given this current natural disaster. We must act urgently so that we do not fail Haiti again.

Dr Anita Zaidi is the director of the enteric and diarrhoeal diseases programme at the Bill & Melinda Gates Foundation. Helen Matzger is a senior programme officer on the vaccine delivery team at the foundation, supporting the EDD portfolio on rotavirus and cholera vaccines

New Yorker

<http://www.newyorker.com/>

Accessed 8 October 2016

[No new, unique, relevant content]

New York Times

<http://www.nytimes.com/>

Accessed 8 October 2016

[A Lieutenant in Eradicating Smallpox Remembers the General](#)

By LAWRENCE K. ALTMAN, M.D.OCT. 3, 2016

October 04, 2016

Wall Street Journal

http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us

Accessed 8 October 2016

[Eli Lilly To Buy Boehringer Ingelheim Pet Vaccines Portfolio for \\$885 Million](#)

By Austen Hufford

Oct. 5, 2016 7:38 am ET

Washington Post

<http://www.washingtonpost.com/>

Accessed 8 October 2016

[Despite new Zika funds, states might not get any for months](#)

Some programs that have been delayed include better mosquito control and long-term studies of Zika's impact on children.

Lena H. Sun | National/health-science | Oct 3, 2016

[Think Tanks et al](#)

Brookings

<http://www.brookings.edu/>

Accessed 8 October 2016

[No new relevant content]

Center for Global Development [to 8 October 2016]

<http://www.cgdev.org/page/press-center>

Accessed 8 October 2016

[No new relevant content]

Council on Foreign Relations

<http://www.cfr.org/>

Accessed 8 October 2016

[No new relevant content]

CSIS

<https://www.csis.org/>

Accessed 8 October 2016

[No new relevant content]

*	*	*	*
*	*	*	*

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

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

Support for this service is provided by the [Bill & Melinda Gates Foundation](#); [Aeras](#); [PATH](#); the [International Vaccine Institute](#) (IVI); and industry resource members [Crucell/Janssen/J&J](#), [Pfizer](#), [PRAHS](#), [Sanofi Pasteur U.S.](#), [Takeda](#), [Valera](#) (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.

*	*	*	*
*	*	*	*