



**Vaccines and Global Health: The Week in Review**  
**20 August 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](mailto: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](mailto:david.r.curry@centerforvaccineethicsandpolicy.org).*

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

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

B. [WHO; CDC](#)

C. [Announcements/Milestones/Perspectives](#)

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

E. [Journal Watch](#)

F. [Media Watch](#)

.....  
.....

***Editor's Note:***

*Vaccines and Global Health: The Week in Review resumes publication with this 20 August edition following the Editor's annual leave.*

.....  
.....

**Zika virus** [to 20 August 2016]

*Public Health Emergency of International Concern (PHEIC)*

<http://www.who.int/emergencies/zika-virus/en/>

### **Zika situation report – 18 August 2016**

*Full report:* <http://apps.who.int/iris/bitstream/10665/249534/1/zikasitrep18Aug16-eng.pdf?ua=1>

#### **Key updates**

: Countries and territories reporting mosquito-borne Zika virus infections for the first time:  
Bahamas

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

:: Countries and territories reporting Guillain-Barré syndrome (GBS) cases associated with Zika virus infection for the first time:  
Costa Rica and Guatemala

:: Operational measures from the WHO Eastern Mediterranean Region:

...WHO will conduct Zika risk assessment missions including to Somalia

...WHO is planning a training workshop on Incident Command System with partners in addition to a workshop to develop surveillance strategy and guidance for detection of Zika and other arboviral diseases, both for November 2016.

...WHO is rolling out three training workshops on prevention and control of Aedes mosquitos for national entomologists from August to October

**Zika Open** [to 20 August 2016]

[Bulletin of the World Health Organization]

*:: All papers available here*

RESEARCH IN EMERGENCIES

### **Rapid assessment Zika virus knowledge among clinical specialists in Singapore: A cross-sectional survey**

- Yung CF, Tam CC, Rajadurai VS, Chan JKY, Low MSF, Ng YH, Thoon KC & Tan LK

Posted: 5 August 2016

<http://dx.doi.org/10.2471/BLT.16.183426>

### **WHO: Dispelling rumours around Zika and complications**

Updated

5 August 2016

*Series of short reports challenging incorrect information circulating about Zika.*

**NIH** [to 20 August 2016]

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

August 3, 2016

### **NIH begins testing investigational Zika vaccine in humans**

*Early-stage study will evaluate the experimental vaccine's safety and ability to generate an immune system response in participants.*

The National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, has launched a clinical trial of a vaccine candidate intended to prevent Zika virus infection. The early-stage study will evaluate the experimental vaccine's safety and ability to generate an immune system response in participants. At least 80 healthy volunteers ages 18-35 years at three study sites in the United States, including the NIH Clinical Center in Bethesda, Maryland, are expected to participate in the trial. Scientists at NIAID's Vaccine Research Center (VRC) developed the investigational vaccine — called the NIAID Zika virus investigational DNA vaccine — earlier this year.

The study is part of the U.S. government response to the ongoing outbreak of Zika virus in the Americas. According to the Centers for Disease Control and Prevention, more than 50 countries and territories have active Zika virus transmission (link is external). In the United States and its territories, more than 6,400 Zika cases have been reported. Although Zika infections are usually asymptomatic, some people experience mild illness lasting about a week. However, Zika virus infection during pregnancy can cause a serious birth defect called microcephaly, as well as other severe fetal defects of the brain and other organs. There are no vaccines or specific therapeutics to prevent or treat Zika virus disease.

"A safe and effective vaccine to prevent Zika virus infection and the devastating birth defects it causes is a public health imperative," said NIAID Director Anthony S. Fauci, M.D. "NIAID worked expeditiously to ready a vaccine candidate, and results in animal testing have been very encouraging. We are pleased that we are now able to proceed with this initial study in people. Although it will take some time before a vaccine against Zika is commercially available, the launch of this study is an important step forward."

The NIAID Zika virus investigational DNA vaccine approach is similar to that used for another investigational vaccine developed by NIAID for West Nile virus. That vaccine candidate was found to be safe and induced an immune response when tested in a Phase 1 clinical trial...

**CDC** [to 20 August 2016]

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

*Media Advisory*

FRIDAY, AUGUST 19, 2016

### **CDC Telebriefing: Zika Virus Update - 8-19-2016**

The Centers for Disease Control and Prevention (CDC) has been working with Florida health officials on investigating cases of locally transmitted Zika virus. The most recent information suggests that there...

*Press Release*

FRIDAY, AUGUST 19, 2016

### **Additional area of active Zika transmission identified in Miami Beach**

The Centers for Disease Control and Prevention (CDC) has been working with Florida health officials on investigating cases of locally transmitted Zika virus. An additional area of active Zika transmission...

*Media Statement*

FRIDAY, AUGUST 19, 2016

**[CDC Updates Guidance for Care of Infants Born to Mothers with Possible Zika Virus Infection During Pregnancy](#)**

The Centers for Disease Control and Prevention (CDC) today issued updated interim clinical guidance for health care providers caring for infants born to mothers with possible Zika virus infection during...

**[CDC adds Cayman Islands to interim travel guidance related to Zika virus - Media Statement](#)**

THURSDAY, AUGUST 11, 2016

**MMWR Weekly**

[August 5, 2016 / No. 30](#)

:: Update: Ongoing Zika Virus Transmission — Puerto Rico, November 1, 2015–July 7, 2016  
: Contraceptive Use Among Nonpregnant and Postpartum Women at Risk for Unintended Pregnancy, and Female High School Students, in the Context of Zika Preparedness — United States, 2011–2013 and 2015

**[U.S. government shifts \\$81 million to Zika vaccine research](#)**

Reuters | 12 August 2016

The U.S. Department of Health and Human Services has shifted \$81 million in funds from other projects to continue work on developing vaccines to fight Zika in the absence of any funding from U.S. lawmakers.

In a letter addressed to Nancy Pelosi, a Democrat and minority leader of the U.S. House of Representatives, HHS Secretary Sylvia Burwell said she was allocating \$34 million in funding to the National Institutes of Health and \$47 million to the Biomedical Advanced Research and Development Authority (BARDA) to work on Zika vaccines.

Burwell said the funding was intended to keep Zika vaccine research going despite the lack of funding from U.S. lawmakers, who left for summer recess before allocating any funding to Zika research and preparedness...

.....  
.....

**EBOLA/EVD** [to 20 August 2016]

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

*[Editor's Note:*

*No new content identified. 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](#) ]*

**PLOS NTDs**

18 August 2016

*Viewpoints*

## **Next Steps for Ebola Vaccination: Deployment in Non-Epidemic, High-Risk Settings**

Laura A. Skrip, Alison P. Galvani

<http://dx.doi.org/10.1371/journal.pntd.0004802>

[No abstract; Excerpts]

...Phased vaccination of health care workers in highest risk countries could protect otherwise fragile health systems in the event of Ebola emergence. Approximately 880 health care workers were infected in the West Africa outbreak and nearly 60% died [11]. In Liberia, Sierra Leone, and Guinea, where there is only one physician for more than 20,000 people on average, routine vaccination against Ebola could provide critical protection to safeguard an already inadequate number of medical workers [12]. In addition to the direct protection for medical staff, sufficient coverage in hospital settings would reduce nosocomial transmission (e.g., [13]). Throughout the epidemic in West Africa, occupational risk associated with health care settings, even those not designated for Ebola treatment, led to decisions to miss work. It has been estimated that externalities of the inaccessibility of health care generally during the outbreak may have been even greater than the direct impact due to Ebola-specific mortality [14]...

...With current stockpiles of over 150,000 doses of the rVSV-ZEBOV vaccine as well as recent production of 9,000 for the trial in Guinea and 6,000 for the STRIVE trial in Sierra Leone, sustaining current production capacity would be sufficient for phasing in the proactive approach of vaccinating health care workers in high-risk settings while building a stockpile for reactive deployment in the event of an outbreak. For instance, production capacity of 9,850 doses per month would be enough to vaccinate health care workers in all high-risk areas within 24 months and all moderate-risk areas over a subsequent 30 months...

...The approach of vaccinating health workers is potentially more feasible than other mass vaccination campaigns because it targets a relatively well-defined and receptive population. Although suspended in the absence of active transmission, vaccination of 6,000 health care and other frontline workers in seven urban and rural areas of Sierra Leone had been undertaken as part of the STRIVE trial. The recruitment strategies and enrollment milestones designed for this study could inform the development of routine vaccination protocols. A convenient administration strategy could be the vaccination of nurses and physicians during their training. Because duration of health care worker occupation is typically several decades, boosters may be necessary to sustain protection in the event of waning efficacy. In countries with little turnover within the profession, high coverage rates would be maintained without requiring large-scale "catch up" campaigns. Furthermore, the health care workforce is expected to have higher vaccine acceptance. During the Ebola June 2015 resurgence in Monrovia, physicians and health workers from hospitals where cases were being treated and/or contacts were being quarantined have opted to receive the vaccine [23]...

.....  
.....

**POLIO** [to 20 August 2016]

*Public Health Emergency of International Concern (PHEIC)*

### **Polio this week as of 17 August 2016**

:: After advance notification of WPV1 in Borno state, Nigeria last week, two cases of WPV1 have now been officially reported, the first since July 2014. Virus was isolated in two local

government areas (LGA) of Borno; in Gwoza, in a child with acute flaccid paralysis, onset of paralysis on 13 July and close healthy contacts of that child; and in Jere from a close healthy contact of a child who had developed AFP symptoms on 4 July.

:: An outbreak response plan has begun, focusing on both Nigeria and the Lake Chad sub-region more broadly (specifically parts of Chad, northern Cameroon, southern Niger and Central African Republic). See 'Nigeria' and 'Lake Chad sub-region' sections for more.

:: Coming soon: the Global Polio Eradication Initiative web site is getting a makeover. Keep a lookout for the new design of the site, which will allow visitors to see the latest information on the programme, interactive data visualizations and media content including photo essays and videos. Existing resources from our current website will be available on the new site as well.

:: The GPEI seeks nominations for members of the new Independent Monitoring Board (IMB) that will monitor and guide polio transition ('legacy') planning. The closing date for nominations is Friday 9 September 2016. This new Transition IMB is separate from the current IMB, which monitors and guides progress towards interruption of transmission. Further information [here](#).

#### *:: Selected Country Updates [excerpted]*

##### ***Nigeria***

:: In Nigeria, wild poliovirus type one (WPV1) has been detected from Borno state. Virus was isolated in two local government areas (LGA) of Borno; in Gwoza, in a child with acute flaccid paralysis (AFP), onset of paralysis on 13 July and close healthy contacts of that child; and in Jere from a close healthy contact of a child who had developed AFP symptoms on 6 July.

:: These are the first WPV1 detected in Nigeria since July 2014. Genetic sequencing of the isolated viruses suggest they are most closely linked to WPV1 last detected in Borno in 2011, indicating the strain has been circulating without detection since that time.

: An outbreak response plan has begun under the guidance of the Emergency Operations Committee, led by the Government of Nigeria and with support from WHO and GPEI partners. Detailed field investigations are underway with two investigation teams constituted by the Borno State EOC and deployed to Jere and Gwoza LGAs respectively.

:: Surveillance is being strengthened. A community case search ongoing, targeting a minimum of 50,000 households around each case. An external surveillance review has begun and will continue until 26 August in five states: Borno, Kano, Kaduna, Sokoto and Federal Capital Territory (FCT).

:: An emergency vaccination response is underway from 15-18 August. Five subsequent large-scale supplementary immunization activities (SIAs) with bivalent oral polio vaccine (bOPV) are planned, the first one scheduled for 27-30 August, and subsequent rounds planned at short intervals of two to three weeks, with the SIAs due to be completed by 22 November.

##### ***Lake Chad sub-region***

:: The detection of WPV1 in Borno state, Nigeria poses a risk to the neighbouring countries of the Lake Chad sub-region and hence an outbreak response plan is being implemented as part of the response to the Nigeria outbreak.

: A WHO Lake Chad Task Force has been established to coordinate the response to the cVDPV2 positive environmental sample detected in March in Maiduguri LGA, Borno.

**UNICEF** [to 20 August 2016]

[http://www.unicef.org/media/media\\_89711.html](http://www.unicef.org/media/media_89711.html)

**New polio cases in northeastern Nigeria underline risks for children in conflict - UNICEF**

NEW YORK, 11 August 2016 – The sobering news that two children have been paralyzed by wild poliovirus in northeastern Nigeria underscores the urgency of eradicating the disease in conflict-affected areas, UNICEF said today.

The Government of Nigeria and the World Health Organization have confirmed an outbreak of wild poliovirus in conflict-ridden Borno state, where children are already facing dangerously high levels of malnutrition. The two cases were discovered in parts of Borno that have recently become accessible, but large areas of the state remain unreachable.

Nigeria – and the continent – had its last confirmed polio case two years ago and was within a year of being certified polio-free, thanks to a massive mobilization by the government, partners and local health providers.<sup>3333</sup>

“We cannot deny the connection between conflict and the continued threat of polio. The two new cases mean children across the Lake Chad region are now at particular risk. With our partners, we will not stop until we reach every child with polio vaccination,” said UNICEF Polio Eradication Director Reza Hossaini.

The Federal Ministry of Health of Nigeria, supported by WHO, UNICEF and partners of the Global Polio Eradication Initiative, are rolling out an emergency immunization campaign, starting in the accessible parts of Borno state.

**BMGF - Gates Foundation** [to 20 August 2016]

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

AUGUST 11, 2016

**Bill & Melinda Gates Foundation Statement on Wild poliovirus in Nigeria**

SEATTLE (August 11th, 2016) - The foundation is deeply concerned about the confirmation of wild poliovirus in Nigeria on what would have been the two-year anniversary with no reported cases on the continent of Africa. Polio is a terrible disease and we are saddened by the news that two children were paralyzed due to the virus.

**Weekly Epidemiological Record (WER)**

5 August 2016, vol. 91, 31 (pp. 365–380)

:: Update on vaccine-derived polioviruses worldwide, January 2015–May 2016

:: Environmental isolation of circulating vaccine-derived poliovirus after interruption of wild poliovirus transmission, Nigeria, 2016

**CDC** [to 20 August 2016]

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

**Two Cases of Polio Detected in Nigeria - Media Statement**



FRIDAY, AUGUST 12, 2016

**MMWR Weekly August 5, 2016 / No. 30**

:: Update on Vaccine-Derived Polioviruses — Worldwide, January 2015–May 2016

:: Environmental Isolation of Circulating Vaccine-Derived Poliovirus After Interruption of Wild Poliovirus Transmission — Nigeria, 2016

.....  
.....

**Yellow Fever** [to 20 August 2016]

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

**Yellow Fever - Situation Report – 19 August 2016**

*Full Report:*

<http://apps.who.int/iris/bitstream/10665/249535/1/yellowfeversitrep19Aug16-eng.pdf?ua=1>

**Key updates:**

*Angola epidemiological update (as of 11 August):*

- :: There have been no new confirmed cases since 23 June;
- :: 3922 suspected cases, with 369 deaths (Case fatality rate: 9.4%);
- :: 879 of 3922 suspected cases have been laboratory confirmed, with 119 deaths amongst confirmed cases (CFR: 13.5%);
- :: 16 of 18 provinces have reported at least one confirmed case, with local transmission.

*Mass reactive vaccination campaigns*

Mass reactive vaccination campaigns in Angola have been implemented in areas with confirmed local transmission (Fig 4). In addition, a preventive vaccination campaign targeting approximately three million people in phase I and additional two million people in phase II, was launched on 15 August. The initial phase of the campaign aims to immunize at-risk populations in 22 districts, 17 of which are on, or close to Angola's border with The Democratic Republic of The Congo (DRC), Namibia, and Republic of Congo. As of 18 August 922 177 people had been vaccinated — 31% of the target population for phase I campaign.

*DRC epidemiological update (as of 18 August):*

- :: 2357 suspected cases from seven of 26 Provinces;
- :: 73 confirmed cases\* have been identified from 1956 suspected cases that have been laboratory tested, with 16 deaths (CFR: 21.9%)(Table 1);
- :: Of the 73 confirmed cases:
  - ...56 acquired infection in Angola,
  - ...13 are autochthonous
  - ...3 are cases of sylvatic transmission (not related to the outbreak),
  - ...One remains under investigation.

*Preventive vaccination campaign*

A preventive vaccination campaign was launched in DRC on 17 August. The campaign aims to immunize over 8 million people in 32 Health Zones in Kinshasa province, and an additional 3 million people in 16 Health Zones on or near the border with Angola. The vaccination campaign in Kinshasa will use the fractionate dose strategy, which is administered at one-fifth of the



standard vaccine dose, and is only recommended for use in an emergency situation in the context of limited vaccine availability.

### **WHO: Yellow fever vaccination campaign starts in Kinshasa, Democratic Republic of the Congo**

18 August 2016

### **WHO: Mass vaccination campaign to protect millions against yellow fever in Angola and Democratic Republic of the Congo**

August 2016

One of the largest emergency vaccination campaigns ever attempted in Africa will start in Angola and the Democratic Republic of Congo this week as WHO and partners work to curb a yellow fever outbreak that has killed more than 400 people and sickened thousands more. Working with Ministries of Health in the 2 countries, WHO is coordinating 56 global partners to vaccinate more than 14 million people against yellow fever in more than 8000 locations. The yellow fever outbreak has found its way to dense, urban areas and hard-to-reach border regions, making planning for the vaccination campaign especially complex.

Emergency yellow fever vaccination campaigns have already reached more than 13 million people in Angola and more than 3 million in Democratic Republic of the Congo. These campaigns have been crucial to stopping the spread of the outbreak. Some areas are still considered at high risk and so preventive vaccination campaigns are planned for the capital city of Kinshasa in Democratic Republic of the Congo and along the country's border with Angola, which spans 2646 km. The preventive vaccination campaign aims to build protection in the population perceived to be at high risk of getting infected and prevent potential spread and expansion of the current outbreak.

Kinshasa has more than 10 million people, with only 2 million already vaccinated against yellow fever. With local transmission of the virus and low immunity in the population, there is a potential risk that the deadly outbreak could spread to other urban areas. Protecting as many people as possible.

With limited supplies of the vaccine, and a 6-month minimum manufacturing process, WHO has been working with the Ministries of Health to plan the mass vaccination campaign that uses one-fifth of the standard vaccine dose as a short-term emergency measure to reach as many people as possible.

This method, known as fractional dosing, was recommended by WHO's Strategic Advisory Group of Experts on Immunization (SAGE), after it reviewed existing evidence that demonstrated lower doses would protect people safely and effectively against the disease for at least 12 months, and likely much longer. The fractional dose will not entitle people to travel internationally, but it will protect them from yellow fever during this outbreak and will help stop it from spreading further...

## **Weekly Epidemiological Record (WER)**

[12 August 2016, vol. 91, 32 \(pp. 381–388\)](#)  
:: Yellow fever in Africa and South America, 2015

.....  
.....

**MERS-CoV** [to 20 August 2016]  
<http://www.who.int/emergencies/mers-cov/en/>

*No new content posted.*

.....  
.....

**WHO & Regional Offices** [to 20 August 2016]

### **Weekly Epidemiological Record (WER)**

[19 August 2016, vol. 91, 33 \(pp. 389–396\)](#)

:: Immunization and Vaccine-related Implementation Research Advisory Committee (IVIR-AC): summary of conclusions and recommendations, 30 May – 1 June 2016 meeting

[12 August 2016, vol. 91, 32 \(pp. 381–388\)](#)

:: Yellow fever in Africa and South America, 2015

[5 August 2016, vol. 91, 31 \(pp. 365–380\)](#)

:: Update on vaccine-derived polioviruses worldwide, January 2015–May 2016

: Environmental isolation of circulating vaccine-derived poliovirus after interruption of wild poliovirus transmission, Nigeria, 2016

### **Disease Outbreak News (DONs)**

:: [Human infection with avian influenza A\(H7N9\) virus – China](#) 17 August 2016

:: [Chikungunya – Kenya](#) 9 August 2016

:: [Rift Valley fever in China](#) 2 August 2016

### ***Highlights***

#### **South Sudan health crisis worsens as more partners pull out**

August 2016 – The recent escalation of the conflict in South Sudan has forced many people to flee, including those that were supporting the health response. Diseases that are already major causes of death in the country, such as malaria and acute watery diarrhoea, can become even more fatal with a lack of health workers.

#### **Michael R. Bloomberg becomes WHO Global Ambassador for Noncommunicable Diseases**

August 2016 – WHO has today named Mr Michael R. Bloomberg, philanthropist and former three-term Mayor of the City of New York, as Global Ambassador for Noncommunicable

Diseases (NCDs). In his new role, Mr Bloomberg will work with national and local political leaders to highlight the burden of NCDs and injuries.

### **Heightened response to cholera outbreak in Central African Republic**

August 2016 – Amid an ongoing humanitarian crisis in the Central African Republic, WHO and partners are working with the country's Ministry of Health respond to a cholera outbreak declared on 10 August 2016 with 46 confirmed cases and 13 deaths from the cities of Djoujou, Damara and Bangui.

### **Diagnosis of pulmonary tuberculosis**

August 2016 – WHO recommends the use of loop-mediated isothermal amplification (TB-LAMP) for the diagnosis of pulmonary tuberculosis. It can also be considered as a follow-on test to microscopy in adults with signs and symptoms of pulmonary TB.

### **Stillbirths, maternal and neonatal deaths underreported**

16 August 2016 – The day of birth is potentially the most dangerous time for mothers and babies. Every year, worldwide, 303 000 women die during pregnancy and childbirth, 2.7 million babies die during the first 28 days of life and 2.6 million babies are stillborn. Today, WHO is launching 3 publications to help countries improve their data on stillbirths and maternal and neonatal deaths.

### **IVB: Call for consultants: PCV data manager pdf, 137kb**

11 August 2016

Deadline for application: 1 September 2016

## **:: WHO Regional Offices**

*Selected Press Releases, Announcements*

### **WHO African Region AFRO**

**:: African governments urged to prioritise health in their development efforts**

Addis Ababa, 19 August 2016 – Health ministers from the World Health Organization's (WHO) African Region have begun a five-day meeting to discuss some key health issues affecting the Region. Addressing the opening session in Addis Ababa, the President of Federal Democratic Republic of Ethiopia, His Excellency, Dr Mulatu Teshome, observed that in the coming decades non-communicable and communicable diseases, epidemics and Africa's demographic shifts will pose significant challenges to development. He stressed the importance of strengthening health systems and preparedness to address both current and emerging challenges...

### **WHO Region of the Americas PAHO**

**:: Latin American Countries Conduct Surveys to Identify Gaps in knowledge about Zika, with support from PAHO/WHO (08/12/2016)**

**:: World Breastfeeding Week: Breastfed infants have healthier futures (08/02/2016)**

### **WHO South-East Asia Region SEARO**

*No new digest content identified.*

### **WHO European Region EURO**

:: World Humanitarian Day: recognizing our shared humanity and ensuring health for the Region's most vulnerable 19-08-2016  
:: President of Romania underscores importance of taking action on environment and health during high-level policy dialogue 15-08-2016  
:: Countries commit to keep Europe malaria-free 15-08-2016  
:: No new cases in enterohaemorrhagic Escherichia coli outbreak in the United Kingdom 15-08-2016

### **WHO Eastern Mediterranean Region EMRO**

:: #ProtectHealthWorkers: stop the attacks on health care in Syria  
18 August 2016 – #ProtectHealthWorkers is a campaign by WHO focusing on health workers and health facilities, highlighting the challenges and risks they face every day, and monitoring their safety, making sure they remain protected and unharmed. Syria is now the most dangerous country in the world for health workers. The number of attacks on hospitals and health centres is increasing.  
:: WHO condemns attack on Abs Hospital and calls for protection of health staff and facilities in Yemen  
17 August 2016  
: Hospitals turned into graveyards: child and maternity hospital in Aleppo hit  
17 August 2016

### **WHO Western Pacific Region**

*No new digest content identified.*

.....  
.....

**CDC/ACIP** [to 20 August 2016]

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

*Media Advisory*

FRIDAY, AUGUST 19, 2016

#### **CDC Telebriefing: Zika Virus Update - 8-19-2016**

The Centers for Disease Control and Prevention (CDC) has been working with Florida health officials on investigating cases of locally transmitted Zika virus. The most recent information suggests that there...

*Press Release*

FRIDAY, AUGUST 19, 2016

#### **Additional area of active Zika transmission identified in Miami Beach**

The Centers for Disease Control and Prevention (CDC) has been working with Florida health officials on investigating cases of locally transmitted Zika virus. An additional area of active Zika transmission...

*Media Statement*

FRIDAY, AUGUST 19, 2016

#### **CDC Updates Guidance for Care of Infants Born to Mothers with Possible Zika Virus Infection During Pregnancy**

The Centers for Disease Control and Prevention (CDC) today issued updated interim clinical

guidance for health care providers caring for infants born to mothers with possible Zika virus infection during...

### **Two Cases of Polio Detected in Nigeria - Media Statement**

FRIDAY, AUGUST 12, 2016

### **CDC adds Cayman Islands to interim travel guidance related to Zika virus - Media Statement**

THURSDAY, AUGUST 11, 2016

### **MMWR Weekly**

[August 19, 2016 / No. 32](#)

:: Announcement: Clinical Practice Guidelines Published for Treatment of Drug-Susceptible Tuberculosis

[August 12, 2016 / No. 31](#)

:: Outbreak of Plague in a High Malaria Endemic Region — Nyimba District, Zambia, March–May 2015

[August 5, 2016 / No. 30](#)

:: Update on Vaccine-Derived Polioviruses — Worldwide, January 2015–May 2016

:: Environmental Isolation of Circulating Vaccine-Derived Poliovirus After Interruption of Wild Poliovirus Transmission — Nigeria, 2016

:: Update: Ongoing Zika Virus Transmission — Puerto Rico, November 1, 2015–July 7, 2016

: Contraceptive Use Among Nonpregnant and Postpartum Women at Risk for Unintended Pregnancy, and Female High School Students, in the Context of Zika Preparedness — United States, 2011–2013 and 2015

.....  
.....

### **Announcements/Milestones/Perspectives**

**UNICEF** [to 20 August 2016]

[http://www.unicef.org/media/media\\_89711.html](http://www.unicef.org/media/media_89711.html)

*Selected Press Releases*

#### **UNICEF and partners respond to the cholera outbreak in Central African Republic**

BANGUI, Central African Republic, 12 August 2016 - At least 16 people have died in the first cholera outbreak in the Central African Republic (CAR) since 2011. The outbreak was declared by the national authorities on 10 August. 66 cases, including at least seven children, are recorded along the Oubangui River. *[No mention of OCV use in response]*

#### **New polio cases in northeastern Nigeria underline risks for children in conflict - UNICEF**

NEW YORK, 11 August 2016 – The sobering news that two children have been paralyzed by wild poliovirus in northeastern Nigeria underscores the urgency of eradicating the disease in conflict-affected areas, UNICEF said today.

## **IAVI – International AIDS Vaccine Initiative** [to 20 August 2016]

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

### **IAVI Awarded NIH Contract to Expedite AIDS Vaccine Development**

August 9, 2016

IAVI to ensure characterization and manufacturing of AIDS vaccine immunogens

The International AIDS Vaccine Initiative (IAVI) has been awarded a new contract from the National Institute of Allergy and Infectious Diseases (NIAID), part of the U.S. National Institutes of Health (NIH) to expedite the development of promising AIDS vaccine candidates.

Under the contract, IAVI will provide a range of product development services to advance the characterization and manufacturing of HIV envelope protein immunogens designed by NIAID-supported scientists. The agreement provides for funding in an amount up to US\$98M over a seven-year period.

HIV envelope protein immunogens are being developed in an effort to induce a broad and effective protective immune response to help prevent HIV infection. Manufacturing of these immunogens so that they can be evaluated in human clinical trials has proved challenging given the complexity and instability of the HIV envelope proteins. Translating promising research concepts from the laboratory into vaccine candidates that can be evaluated for safety and the ability to elicit targeted immune responses in human clinical studies represents a major obstacle facing many researchers working on envelope immunogens globally. Optimizing HIV vaccine manufacturing processes should help expedite the development and evaluation of promising vaccine candidates across the entire field.

"We are very pleased to expand the provision of vaccine product development expertise to support NIAID-sponsored AIDS vaccine programs," IAVI President and CEO Mark Feinberg said. "NIAID is the largest funder of HIV vaccine research worldwide, and IAVI welcomes the opportunity to work with them to help advance their efforts and those of the numerous outstanding researchers they support. IAVI is dedicated to expediting the development and global availability of an effective HIV vaccine, and is committed to supporting the success of the overall efforts of the HIV vaccine field. Building on IAVI's experience in the characterization and production of HIV envelope vaccine candidates, our efforts to advance the work of NIAID-supported investigators will also provide additional opportunities to develop and share insights and innovations into how to make the HIV vaccine production process as reliable, robust and timely as possible. Given the imperative to accelerate HIV vaccine development efforts, this new partnership with NIAID promises to facilitate meaningful progress and impact towards this goal."

IAVI and NIAID have been partnering closely in AIDS vaccine research for many years, including in the design and development of HIV envelope immunogens to elicit broadly protective antibody responses.

## **Global Fund** [to 20 August 2016]

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

03 August 2016

### **Tata Trusts and the Global Fund Launch India Health Fund**

MUMBAI - Tata Trusts and the Global Fund to Fight AIDS, Tuberculosis and Malaria have launched the India Health Fund, an innovative initiative to raise funds within India and invest the money to tackle key health challenges, starting with tuberculosis and malaria.

"The India Health Fund is an ambitious project undertaken by Tata Trusts along with the Global Fund and the Government of India," said Ratan Tata, Chairman of Tata Trusts.

"Infectious diseases such as malaria and tuberculosis, though widespread, are treatable and controllable. In order to overcome the challenges associated with this issue, we should use innovations to create models that are not geographically bound and can be replicated anywhere in the world. The India Health Fund will endeavor to combine innovation and effort for the implementation of the project at a large scale."

As an innovative financing platform, the India Health Fund will help leverage and pool private sector resources and expertise to support health programs that are supported by the Global Fund and other partners. One of the objectives of the new fund is to help support existing effective solutions against communicable diseases, and further expand the response to these diseases...

### **IVI - International Vaccine Institute** [to 20 August 2016]

<http://www.ivi.org/web/www/home>

August 8, 2016

### **Global Virus Network Adds International Vaccine Institute (IVI) as Newest Center of Excellence**

Seoul, South Korea The Global Virus Network (GVN), representing 36 Centers of Excellence and 6 Affiliates in 25 countries and comprising foremost experts in every class of virus causing disease in humans, and the International Vaccine Institute (IVI) announced today the induction of IVI as GVN's newest Center of Excellence. IVI is headquartered on the campus of Seoul National University in Seoul, South Korea. The announcement was made by Robert Gallo, MD, Co-Founder and Scientific Director of GVN and Jerome Kim, MD, Director General of IVI. IVI is the first organization in Korea to become a GVN Center of Excellence.

"IVI... brings to the GVN an array of viral expertise, including HIV, Dengue, MERS-CoV and hepatitis E as well as a significant global reach with its field sites in nearly 30 countries in Asia, Africa and South America," said Dr. Gallo, who is co-discoverer of HIV and Director of the Institute (IHV) of Human Virology at the University of Maryland School of Medicine, a GVN Center of Excellence. "GVN is very pleased to welcome IVI into the network and looks forward to officially introducing IVI to GVN's Centers of Excellence at our upcoming international meeting in Japan this fall."

The International Vaccine Institute (IVI) "is an international nonprofit organization that was founded on the belief that the health of children in developing countries can be dramatically improved by the use of new and improved vaccines. Working in collaboration with the international scientific community, public health organizations, governments, and industry, IVI is involved in all areas of the vaccine spectrum – from new vaccine design in the laboratory to vaccine development and evaluation in the field to facilitating sustainable introduction of vaccines in countries where they are most needed."...

### **FDA** [to 20 August 2016]



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

### **What's New for Biologics**

:: Influenza Virus Vaccine for the 2016-2017 Season

Posted: 8/17/2016

:: Advice to Blood Collection Establishments on Non-Travel Related Cases of Zika Virus in Florida

Updated: 8/4/2016

**European Medicines Agency** [to 20 August 2016]

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

15/08/2016

### **Better monitoring of biological medicines**

New chapter in guidelines on good pharmacovigilance practices...

11/08/2016

### **Data integrity: key to public health protection**

New guidance now available on EMA's website...

08/08/2016

### **EU collaboration strengthens safety monitoring of medicines**

European Commission publishes three-year report on implementation of pharmacovigilance legislation...

05/08/2016

### **Transparency in drug regulation**

Publication of assessment reports in Europe and Australia makes information on medicines more easily available...

04/08/2016

### **Increasing the availability of veterinary vaccines in the EU**

EMA-HMA action plan published along with new webpage...

03/08/2016

### **Adaptive pathways: key learnings and next steps**

EMA publishes report on pilot project and will organise workshop in December to further explore concept...

01/08/2016

### **Development of medicines to treat tuberculosis**

Comments on draft guidance invited until 31 January 2017...

**PATH** [to 20 August 2016]

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

*Announcement* | August 04, 2016

### **PATH welcomes Bruce McNamer to its board of directors**

PATH's board of directors has voted to appoint Bruce McNamer, JD, MBA, to the board. With a long and distinguished career in philanthropy, business, and public service, McNamer adds a diverse set of skills and expertise to the PATH board.

**GHIT Fund** [to 20 August 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.*

2016.08.12 News

**[Stephen Caddick, Wellcome Trust's Innovations Director, Joins GHIT Fund Council](#)**

**European Vaccine Initiative** [to 20 August 2016]

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

News - 11 August 2016

**[MARCAD is calling for applications for fellowships](#)**

The MAlaria Research CApacity Development consortium (MARCAD) is currently calling for applications for 5 PhD and 10 post Postdoctoral Fellowships.

Deadline: 31 August 2016

**Industry Watch** [to 20 August 2016]

**:: [GSK unveils campaign to help prevent meningitis](#)**

*Parents, young adults urged to educate themselves about meningitis B, responsible for one-third of U.S. cases*

PHILADELPHIA, Aug. 5, 2016 /PRNewswire-USNewswire/ -- GSK (LSE: GSK) today launched an educational campaign to help raise awareness of meningitis, a rare but potentially deadly disease. Most teens and young adults have not received the vaccines needed to help protect against all five vaccine-preventable groups of meningitis.<sup>2</sup> The campaign, Take 5 for Meningitis, will use news media, social media and educational events to help educate parents and young adults about meningitis and urge them to talk to their healthcare provider about vaccination to help prevent it...

.....  
.....

**AERAS** [to 20 August 2016]

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

*No new digest content identified.*

**EDCTP** [to 20 August 2016]

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

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

*No new digest content identified.*

**Fondation Merieux** [to 20 August 2016]

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

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

*No new digest content identified.*

**Gavi** [to 20 August 2016]

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

*No new digest content identified*

**Hilleman Laboratories** [to 20 August 2016]

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

*No new digest content identified*

**Human Vaccines Project** [to 20 August 2016]

[humanvaccinesproject.org](http://humanvaccinesproject.org)

*[Website in development]*

**Sabin Vaccine Institute** [to 20 August 2016]

<http://www.sabin.org/updates/ressreleases>

*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](mailto:david.r.curry@centerforvaccineethicsandpolicy.org)

**Blue Marble Health: An Innovative Plan to Fight Diseases of the Poor amid Wealth**

Johns Hopkins University Press | August 2016

Paperback, 224 pages

ISBN: 9781421420462

Book by Peter J. Hotez, MD, PhD

*foreword by Cher*

In 2011, Dr. Peter J. Hotez relocated to Houston to launch Baylor's National School of Tropical Medicine. He was shocked to discover that a number of neglected diseases often associated with developing countries were widespread in impoverished Texas communities. Despite the United States' economic prowess and first-world status, an estimated 12 million Americans living at the poverty level currently suffer from at least one neglected tropical disease, or NTD.

Hotez concluded that the world's neglected diseases—which include tuberculosis, hookworm infection, lymphatic filariasis, Chagas disease, and leishmaniasis—are born first and foremost of extreme poverty.

In this book, Hotez describes a new global paradigm known as "blue marble health," through which he asserts that poor people living in wealthy countries account for most of the world's poverty-related illness. He explores the current state of neglected diseases in such disparate countries as Mexico, South Korea, Argentina, Australia, the United States, Japan, and Nigeria. By crafting public policy and relying on global partnerships to control or eliminate some of the world's worst poverty-related illnesses, Hotez believes, it is possible to eliminate life-threatening disease while at the same time creating unprecedented opportunities for science and diplomacy.

Clear, compassionate, and timely, *Blue Marble Health* is a must-read for leaders in global health, tropical medicine, and international development, along with anyone committed to helping the millions of people who are caught in the desperate cycle of poverty and disease.

\* \* \* \*

### ***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](mailto:david.r.curry@centerforvaccineethicsandpolicy.org)*

### **American Journal of Infection Control**

August 2016 Volume 44, Issue 8, p857-962, e125-e144

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

[Reviewed earlier]

### **American Journal of Preventive Medicine**

August 2016 Volume 51, Issue 2, p151-280, e27-e56

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

[Reviewed earlier]

### **American Journal of Public Health**

Volume 106, Issue 8 (August 2016)

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

[Reviewed earlier]

### **American Journal of Tropical Medicine and Hygiene**

August 2016; 95 (2)  
<http://www.ajtmh.org/content/current>

*Editorials*

### **Documenting the Human Health Impacts of Climate Change in Tropical and Subtropical Regions**

Jennifer M. Kreslake, Mona Sarfaty, and Edward W. Maibach

Am J Trop Med Hyg 2016 95:260-262; Published online June 13, 2016, doi:10.4269/ajtmh.16-0400

OPEN ACCESS ARTICLE

*[Initial text]*

Climate change is harming human health, and the magnitude of the harm is increasing.<sup>1</sup> This is especially true in tropical and subtropical regions that are vulnerable to greater intensity, frequency, and duration of extreme weather, such as hurricanes, drought, and increases in heat, as a result of climate change.<sup>2</sup> Nearly all countries situated in the geographic tropics are poor, and therefore have fewer resources to adapt to impacts of climate change.<sup>3,4</sup> Protecting the public's health in these regions from serious—potentially catastrophic—harm associated with climate change requires coordinated response from tropical medicine and global health professionals, and from leaders of civil society more broadly....

### **Annals of Internal Medicine**

16 August 2016, Vol. 165. No. 4

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

*Ideas and Opinions*

### **Low Risk of International Zika Virus Spread due to the 2016 Olympics in Brazil** FREE

Joseph A. Lewnard, MPhil; Gregg Gonsalves, MPhil; and Albert I. Ko, MD

2 August 2016, Vol. 165. No. 3

Reviews

### **The Emergence of Zika Virus: A Narrative Review**

Kathryn B. Anderson, MD, PhD; Stephen J. Thomas, MD; and Timothy P. Endy, MD, MPH

*[Initial text]*

Zika virus (ZIKV) is yet another arbovirus that is rapidly emerging on a global scale, on the heels of a chikungunya epidemic in the Americas that began in 2013. A ZIKV epidemic that began in Brazil in 2015 has now spread rapidly to more than 30 countries in the Americas and the Caribbean, infecting more than 2 million inhabitants. This epidemic currently continues unabated. The explosive nature of recent outbreaks and concerning links to Guillain-Barré syndrome and microcephaly are incompletely understood. Also unknown is the relative importance of sexual transmission of ZIKV and asymptomatic ZIKV infections to the overall burden of transmission. The limited understanding of ZIKV presents an enormous challenge for responses to this rapidly emerging threat to human health. This article reviews the existing literature on ZIKV and proposes critical questions for vaccine development and other areas of needed research.

### **BMC Cost Effectiveness and Resource Allocation**

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

(Accessed 20 August 2016)

[No new relevant content]

## **BMC Health Services Research**

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

(Accessed 20 August 2016)

*Research article*

### **The epidemiology of tuberculosis in health care workers in South Africa: a systematic review**

*In South Africa, workplace acquired tuberculosis (TB) is a significant occupational problem among health care workers. In order to manage the problem effectively it is important to know the burden of TB in hea...*

Liesl Grobler, Shaheen Mehtar, Keertan Dheda, Shahieda Adams, Sanni Babatunde, Martie van der Walt and Muhammad Osman

BMC Health Services Research 2016 16:416

Published on: 20 August 2016

*Research article*

### **Process evaluation for complex interventions in health services research: analysing context, text trajectories and disruptions**

*Process evaluations assess the implementation and sustainability of complex healthcare interventions within clinical trials, with well-established theoretical models available for evaluating intervention deliv...*

Jamie Murdoch

BMC Health Services Research 2016 16:407

Published on: 19 August 2016

## **Research article**

### **Healthcare seeking practices and barriers to accessing under-five child health services in urban slums in Malawi: a qualitative study**

*Access to child health services is an important determinant of child health. Whereas, child health indicators are generally better in urban than rural areas, some population groups in urban areas, such as chil...*

Edgar Arnold Lungu, Regien Biesma, Maureen Chirwa and Catherine Darker

BMC Health Services Research 2016 16:410

Published on: 19 August 2016

## **BMC Infectious Diseases**

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

(Accessed 20 August 2016)

*Review*

### **Antimicrobial stewardship in paediatrics**

*Antibiotics are among the drugs most commonly prescribed to children in hospitals and communities. Unfortunately, a great number of these prescriptions are unnecessary or inappropriate. Antibiotic abuse and mi...*

Nicola Principi and Susanna Esposito

BMC Infectious Diseases 2016 16:424

Published on: 18 August 2016

*Research article*

**Evaluation of impact of measles rubella campaign on vaccination coverage and routine immunization services in Bangladesh**

Md Jasim Uddin, Gourab Adhikary, Md Wazed Ali, Shahabuddin Ahmed, Md Shamsuzzaman, Chris Odell, Lauren Hashiguchi, Stephen S. Lim and Nurul Alam  
BMC Infectious Diseases 2016 16:411

Published on: 12 August 2016

*Abstract*

**Background**

Like other countries in Asia, measles-rubella (MR) vaccine coverage in Bangladesh is suboptimal whereas 90–95 % coverage is needed for elimination of these diseases. The Ministry of Health and Family Welfare (MOHFW) of the Government of Bangladesh implemented MR campaign in January-February 2014 to increase MR vaccination coverage. Strategically, the MOHFW used both routine immunization centres and educational institutions for providing vaccine to the children aged 9 months to <15 years. The evaluation was carried out to assess the impact of the campaign on MR vaccination and routine immunization services.

**Methods**

Both quantitative and qualitative evaluations were done before and after implementation of the campaign. Quantitative data were presented with mean (standard deviation, SD) for continuous variables and with proportion for categorical variables. The overall and age- and sex-specific coverage rates were calculated for each region and then combined. Categorical variables were compared by chi-square statistics. Multiple logistic regression analysis were performed to estimate odds ratios (OR) and 95 % confidence intervals (CI) of coverage associated with covariates, with adjustment for other covariates. Qualitative data were analyzed using content analysis.

**Results**

The evaluations found MR coverage was very low (<13 %) before the campaign and it rose to 90 % after the campaign. The pre-post campaign difference in MR coverage in each stratum was highly significant ( $p < 0.001$ ). The campaign achieved high coverage despite relatively low level (23 %) of interpersonal communication with caregivers through registration process. Child registration was associated with higher MR coverage (OR 2.91, 95 % CI 1.91–4.44). Children who attended school were more likely to be vaccinated (OR 8.97, 95 % CI 6.17–13.04) compared to those who did not attend school. Children of caregivers with primary or secondary or higher education had higher coverage compared to children of caregivers with no formal education. Most caregivers mentioned contribution of the campaign in vaccination for the children not previously vaccinated.

**Conclusions**

The results of the evaluation indicated that the campaign was successful in terms of improving MR coverage and routine immunization services. The evaluation provided an important guideline for future evaluation of similar efforts in Bangladesh and elsewhere.

*Research article*

**Parental attitudes towards measles vaccination in the canton of Aargau, Switzerland: a latent class analysis**



*Despite the successes of routine national childhood vaccination programmes, measles remains a public health concern. The purpose of this paper is to investigate how patterns of parental attitudes are linked to...*

Carine Weiss, Daniel Schröpfer and Sonja Merten

BMC Infectious Diseases 2016 16:400

Published on: 11 August 2016

## **BMC Medical Ethics**

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

(Accessed 20 August 2016)

*Debate*

### **Ethical considerations surrounding the response to Ebola: the Spanish experience**

*The recent Ebola virus disease (EVD) outbreak, with 28,646 reported cases and 11,323 deaths, was declared a public health emergency of international interest by the World Health Organisation.*

Miguel Ángel Royo-Bordonada and Fernando J. García López

BMC Medical Ethics 2016 17:49

Published on: 18 August 2016

*Research article*

### **A survey of patient perspectives on the research use of health information and biospecimens**

*Personal health information and biospecimens are valuable research resources essential for the advancement of medicine and protected by national standards and provincial statutes. Research ethics and privacy s...*

Stacey A. Page, Kiran Pohar Manhas and Daniel A. Muruve

BMC Medical Ethics 2016 17:48

Published on: 15 August 2016

*Research article*

### **Willingness to participate in health research: Tunisian survey**

*Few studies have identified the willingness rate of developing countries population to be enrolled in clinical trials.*

Wahid Bouida, Mohamed Habib Grissa, Asma Zorgati, Kaouthar Beltaief, Hamdi Boubaker, Asma Sriha, Riadh Boukef and Semir Nourira

BMC Medical Ethics 2016 17:47

Published on: 4 August 2016

## **BMC Medicine**

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

(Accessed 20 August 2016)

*Review*

### **The global threat of Zika virus to pregnancy: epidemiology, clinical perspectives, mechanisms, and impact**

Phillipe Boeuf, Heidi E. Drummer, Jack S. Richards, Michelle J. L. Scoullar and James G. Beeson

BMC Medicine 2016 14:112

Published on: 3 August 2016

### *Abstract*

Zika virus (ZIKV) is a mosquito-borne flavivirus that has newly emerged as a significant global threat, especially to pregnancy. Recent major outbreaks in the Pacific and in Central and South America have been associated with an increased incidence of microcephaly and other abnormalities of the central nervous system in neonates. The causal link between ZIKV infection during pregnancy and microcephaly is now strongly supported. Over 2 billion people live in regions conducive to ZIKV transmission, with ~4 million infections in the Americas predicted for 2016. Given the scale of the current pandemic and the serious and long-term consequences of infection during pregnancy, the impact of ZIKV on health services and affected communities could be enormous. This further highlights the need for a rapid global public health and research response to ZIKV to limit and prevent its impact through the development of therapeutics, vaccines, and improved diagnostics. Here we review the epidemiology of ZIKV; the threat to pregnancy; the clinical consequences and broader impact of ZIKV infections; and the virus biology underpinning new interventions, diagnostics, and insights into the mechanisms of disease.

### **BMC Pregnancy and Childbirth**

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

(Accessed 20 August 2016)

[No new relevant content identified]

### **BMC Public Health**

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

(Accessed 20 August 2016)

#### *Research article*

#### **[Social mobilisation, consent and acceptability: a review of human papillomavirus vaccination procedures in low and middle-income countries](#)**

*Social mobilisation during new vaccine introductions encourages acceptance, uptake and adherence to multi-dose schedules. Effective communication is considered especially important for human papillomavirus (HPV)...*

Severin Kabakama, Katherine E. Gallagher, Natasha Howard, Sandra Mounier-Jack, Helen E. D. Burchett, Ulla K. Griffiths, Marta Feletto, D. Scott LaMontagne and Deborah Watson-Jones

BMC Public Health 2016 16:834

Published on: 19 August 2016

#### *Research article*

#### **[Assessing health literacy in the eastern and middle-eastern cultures](#)**

*Health literacy is a term employed to assess the ability of people to meet the increasing demands related to health in a rapidly evolving society. Low health literacy can affect the social determinants of health...*

Satish Chandrasekhar Nair, Karthyayani Priya Satish, Jayadevan Sreedharan and Halah Ibrahim

BMC Public Health 2016 16:831

Published on: 19 August 2016

#### *Research article*

**The expanded program on immunization service delivery in the Dschang health district, west region of Cameroon: a cross sectional survey**

*Vaccination is the most effective intervention strategy, and the provision of vaccination at fixed posts and outreach posts is a backbone of a sustainable vaccination system in developing countries.*

Walter Ebile Akoh, Jérôme Ateudjieu, Julienne Stephanie Nouetchognou, Martin Ndinakie Yakum, Fabrice Djouma Nembot, Sonia Nafack Sonkeng, Micheal Saah Fopa and Pierre Watcho  
BMC Public Health 2016 16:801  
Published on: 17 August 2016

*Research article*

**Cost of rotavirus diarrhea for programmatic evaluation of vaccination in Vietnam**

*Rotavirus is the most common etiology of diarrhea-associated hospitalizations and clinic visits in Vietnamese children < 5 years old. To estimate the economic burden of rotavirus-associated formal healthcare e...*

Arthorn Riewpaiboon, Sunheang Shin, Thi Phuong Mai Le, Dinh Thiem Vu, Thi Hien Anh Nguyen, Neal Alexander and Duc Anh Dang  
BMC Public Health 2016 16:777  
Published on: 11 August 2016

*Research article*

**How does HPV vaccination status relate to risk perceptions and intention to participate in cervical screening? a survey study**

*Women in several countries will soon be covered by two preventive programmes targeting cervical cancer: HPV vaccination and cervical screening. The HPV vaccines are expected to prevent approximately 70 % of ce...*

Mie Sara Hestbech, Dorte Gyrd-Hansen, Jakob Kragstrup, Volkert Siersma and John Brodersen  
BMC Public Health 2016 16:708  
Published on: 3 August 2016

**BMC Research Notes**

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

(Accessed 20 August 2016)

[No new relevant content identified]

**BMJ Open**

2016, Volume 6, Issue 8

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

*Research*

**Uptake of childhood influenza vaccine from 2012–2013 to 2014–2015 in the UK and the implications for high-risk children: a retrospective observational cohort study**

Sankarasubramanian Rajaram, Amy Steffey, Betina Blak, Matthew Hickman, Hannah Christensen, Herve Caspard

BMJ Open 2016;6:e010625 doi:10.1136/bmjopen-2015-010625

*Abstract*

**Objectives** To evaluate changes in influenza vaccination rates in healthy and at-risk children following the implementation of the UK's childhood influenza immunisation programme.

**Design** Observational cohort study before and after initiation of the UK's childhood influenza immunisation programme over three influenza seasons (2012–2013, 2013–2014 and 2014–2015) using data from the Clinical Practice Research Datalink (CPRD).

**Setting** More than 500 primary care practices in the UK.

**Population** All individuals aged 2–17 years on 1 September, with at least 12 months of medical history documented in CPRD were retained in the analysis.

**Intervention** Starting in 2013–2014, all children aged 2 and 3 years were offered influenza vaccination through general practice, and primary school-aged children were offered influenza vaccination in selected counties in England (described as pilot regions). The vaccination programme was extended to all children aged 4 years in England in 2014–2015.

**Main outcome measure** Cumulative vaccination rate from 1 September to 28 February of the next calendar year as assessed by a time-to-event statistical model (vaccination uptake). Age group, sex, region and type of high-risk medical condition were assessed as predictors.

**Results** Vaccination uptake increased considerably from 2012–2013 to 2013–2014 in targeted children aged 2–3 years, both in children with a high-risk medical condition (from 40.7% to 61.1%) and those without (from 1.0% to 43.0%). Vaccination rates increased also, though less markedly, in older children. In 2014–2015, vaccination rates remained higher than 40% in healthy children aged 2–3 years, although they decreased slightly from 2013–2014 (from 43.0% to 41.8%). Vaccination rates in older healthy children continued to increase, driven primarily by an increase in children aged 4 years to 31.3% in 2014–2015.

**Conclusions** The introduction of a universal childhood vaccination policy in the UK increased vaccination rates for targeted children, including those with high-risk conditions.

## **Bulletin of the World Health Organization**

Volume 94, Number 8, August 2016, 557–632

<http://www.who.int/bulletin/volumes/94/8/en/>

### *EDITORIALS*

#### **[A time for action: antimicrobial resistance needs global response](#)**

Tim Jinks, Nancy Lee, Mike Sharland, John Rex, Nicholas Gertler, Matt Diver, Ian Jones, Kiron Jones, Sophie Mathewson, Francesca Chiara & Jeremy Farrar

<http://dx.doi.org/10.2471/BLT.16.181743>

### *RESEARCH*

#### **[Background review for diagnostic test development for Zika virus infection](#)**

Rémi N Charrel, Isabelle Leparç-Goffart, Suzan Pas, Xavier de Lamballerie, Marion Koopmans & Chantal Reusken

<http://dx.doi.org/10.2471/BLT.16.171207>

### *SYSTEMATIC REVIEWS*

#### **[Uptake of the World Health Organization's trauma care guidelines: a systematic review](#)**

Lacey LaGrone, Kevin Riggall, Manjul Joshipura, Robert Quansah, Teri Reynolds, Kenneth Sherr & Charles Mock

<http://dx.doi.org/10.2471/BLT.15.162214>

## POLICY & PRACTICE

### **[Background review for diagnostic test development for Zika virus infection](#)**

Rémi N Charrel, Isabelle Leparç-Goffart, Suzan Pas, Xavier de Lamballerie, Marion Koopmans & Chantal Reusken

<http://dx.doi.org/10.2471/BLT.16.171207>

## **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>

### *Original Article*

### **[The reliability and validity of a child and adolescent participation in decision-making questionnaire](#)**

L. O'Hare, O. Santin, K. Winter and C. McGuinness

First published: 26 June 2016

DOI: 10.1111/cch.12369

### *Abstract*

#### Background

There is a growing impetus across the research, policy and practice communities for children and young people to participate in decisions that affect their lives. Furthermore, there is a dearth of general instruments that measure children and young people's views on their participation in decision-making. This paper presents the reliability and validity of the Child and Adolescent Participation in Decision-Making Questionnaire (CAP-DMQ) and specifically looks at a population of looked-after children, where a lack of participation in decision-making is an acute issue.

#### Methods

The participants were 151 looked after children and adolescents between 10–23 years of age who completed the 10 item CAP-DMQ. Of the participants 113 were in receipt of an advocacy service that had an aim of increasing participation in decision-making with the remaining participants not having received this service.

#### Results

The results showed that the CAP-DMQ had good reliability (Cronbach's alpha = 0.94) and showed promising uni-dimensional construct validity through an exploratory factor analysis. The items in the CAP-DMQ also demonstrated good content validity by overlapping with prominent models of child and adolescent participation (Lundy 2007) and decision-making (Halpern 2014). A regression analysis showed that age and gender were not significant predictors of CAP-DMQ scores but receipt of advocacy was a significant predictor of scores (effect size  $d = 0.88$ ), thus showing appropriate discriminant criterion validity.

#### Conclusion

Overall, the CAP-DMQ showed good reliability and validity. Therefore, the measure has excellent promise for theoretical investigation in the area of child and adolescent participation in decision-making and equally shows empirical promise for use as a measure in evaluating services, which have increasing the participation of children and adolescents in decision-making as an intended outcome.

## **Clinical Therapeutics**

August 2016 Volume 38, Issue 8, p1773-1922

<http://www.clinicaltherapeutics.com/current>  
[New issue: No relevant content identified]

### **Complexity**

July/August 2016 Volume 21, Issue 6 Pages 1–459  
<http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.6/issuetoc>  
[Reviewed earlier]

### **Conflict and Health**

<http://www.conflictandhealth.com/>  
[Accessed 20 August 2016]  
[No new relevant content identified]

### **Contemporary Clinical Trials**

Volume 49, Pages 1-190 (July 2016)  
<http://www.sciencedirect.com/science/journal/15517144/48>  
*Clinical Trial Management and Optimization*

#### **[Paving the way to a more effective informed consent process: Recommendations from the Clinical Trials Transformation Initiative](#)**

Original Research Article

Pages 65-69

Jennifer Lentz, Michele Kennett, Jane Perlmutter, Annemarie Forrest

#### ***Abstract***

Ethically sound clinical research requires that prospective study participants provide voluntary informed consent before any study procedures begin. The original intent was to provide the participant with clear, accurate information about study specifics (e.g., risks/benefits) to aid in the decision to participate. Broad consensus among sponsors, research staff, study participants, and advocates indicate that the current process could be improved to enhance participants' understanding of study-related information and meet the needs of individuals.

The Clinical Trials Transformation Initiative (CTTI) convened a project to identify problems in the current process and to formulate recommendations for improvement. A literature review, expert interviews, and multi-stakeholder meeting were conducted to identify barriers and develop solutions for a more effective informed consent process.

Four key topics were the foundation of the recommendations: 1) defining an effective informed consent process, 2) training research staff, 3) improving the informed consent document, and 4) exploring the use of electronic consent. The ideal informed consent process involves an ongoing, interactive conversation between the participant and knowledgeable, responsive research staff who were trained in best practices. The informed consent process should be supported by a tiered informed consent document that provides critically relevant information to aid in the decision to participate in a study.

Adoption of the CTTI informed consent recommendations should lead to a more participant-centric informed consent process. Participant involvement better meets the needs of participants and benefits the clinical trial enterprise by promoting a research culture that encourages informed participation in clinical studies.

## **Current Opinion in Infectious Diseases**

August 2016 - Volume 29 - Issue 4 pp: v-vi,319-431

<http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx>

[Reviewed earlier]

## **Developing World Bioethics**

August 2016 Volume 16, Issue 2 Pages 61–120

<http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-2/issuetoc>

[Reviewed earlier]

## **Development in Practice**

Volume 24, Number 8

<http://www.developmentinpractice.org/journals/volume-24-number-8>

*Articles*

### **[A training approach for community maternal health volunteers that builds sustainable capacity](#)**

Green, Cathy ; Soyoola, Miniratu; Surridge, Mary ; Kaluba, Dynes

This article examines a training approach for community health volunteers which increased access to maternal health services in rural communities in Zambia. The effectiveness of the training approach was evaluated in an operations research component. Skilled birth attendance rates increased by 63% from baseline over a two-year period in the intervention districts, outperforming increases recorded in control sites at statistically significant levels. As a low-cost, high-impact intervention which shows good sustainability potential, the approach is suitable for national level scale-up and for adaptation for use in other countries in support of maternal and new-born health goals

## **Disasters**

July 2016 Volume 40, Issue 3 Pages 385–588

<http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-3/issuetoc>

[Reviewed earlier]

## **Emerging Infectious Diseases**

Volume 22, Number 9—September 2016

<http://wwwnc.cdc.gov/eid/>

*Research*

### **[Ebola Virus Disease, Democratic Republic of the Congo, 2014 PDF Version \[PDF - 606 KB - 10 pages\]](#)**

C. Nanclares et al.

*Summary*

Differences from other outbreaks could suggest guidance for optimizing clinical management and disease control.



## **Epidemics**

Volume 16, In Progress (September 2016)

<http://www.sciencedirect.com/science/journal/17554365>

[Reviewed earlier]

## **Epidemiology and Infection**

Volume 144 - Issue 12 - September 2016

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

*Original Papers*

*War and infection*

### **[Gender disparities in mortality from infectious diseases in Serbia, 1991–2014: a time of civil wars and global crisis.](#)**

M. ILIC and I. ILIC (2016).

*Abstract*

Infectious diseases remain one of the leading causes of death worldwide. The aim of this descriptive epidemiological study was to analyse the trends in mortality from infectious diseases in Serbia (excluding the Autonomous Province of Kosovo & Metohia) from 1991 to 2014 using joinpoint regression analysis. The mortality rates from infectious diseases were found to have increased markedly from 1991 to 1994 (+12·4% per year), followed by a significant decline from 1994 to 2009 (–4·6% per year) and then another increase from 2009 to 2014 (+4·3% per year). Throughout the study period, mortality rates were consistently higher in men than in women. Although a substantial decline was observed for young people of both sexes, no consistent pattern was evident for the middle-aged nor the elderly. Since 1991, septicaemia has emerged as a leading cause of infectious disease mortality, particularly in older men. The Yugoslav civil wars in the 1990s and the global financial crisis in 2008 corresponded with changes in the trends in mortality from infectious diseases in Serbia, with the elderly showing particular vulnerability during those time periods. Data presented in this study might be useful to improve control of infectious diseases in Serbia.

## **The European Journal of Public Health**

Volume 26, Issue 4, 1 August 2016

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

*Editorials*

### **[Research on public health interventions: the need for a partnership with practitioners](#)**

François Alla

DOI: <http://dx.doi.org/10.1093/eurpub/ckw073> 531 First published online: 15 July 2016

*Extract*

Public health intervention research (IR) is defined as the use of research methods to produce knowledge concerning interventions, whether or not they are conducted in the context of the health system.<sup>1</sup>

The purpose of this research is to demonstrate the efficacy of interventions, and in addition analyse their causal mechanisms, conditions and modalities of their implementation, as well as reproducibility and durability. By definition, IR is designed to produce knowledge used in interventions and decisions and therefore has a major social role, constituting a 'science of solutions', as formulated by Potvin,<sup>2</sup> who considers that this type of research is underrated

compared to the 'science of problems' (i.e. research into determinants). There is nevertheless a growing interest in ...

#### *Viewpoints*

### **What are we told? A news media monitoring model for public health and the case of vaccines**

A. Odone, C. Signorelli Eur J Public Health (2016) 26 (4): 533-534 DOI: <http://dx.doi.org/10.1093/eurpub/ckw002> First published online: 15 July 2016 (2 pages)

#### *Extract*

How can we, the public health community, together with national and international health authorities make sure effective health education messages reach the general population? We propose a news media monitoring model for public health and a set of indicators that can be used to quantitatively assess health education and communication messages delivered through news media. We piloted it to the case of vaccines on 1-year issues (n=366) of the most read Italian newspaper. As done in marketing strategies, media monitoring is a valuable tool to inform health promotion interventions and communication strategies.

Media play a crucial role in channelling health-related information: they are powerful tools to deliver health education and promote disease prevention. However, if misused or exploited, they can negatively influence general population's health attitudes and behaviours. In previous work we reported on the detrimental impact that messages delivered through news media had on vaccine uptake in the last influenza season in Italy.<sup>1</sup> Despite being among the most effective primary prevention tools ever invented, vaccines are 'victims of their own success' and have recently lost public confidence. The World Health Organization has recently warned against the growing phenomenon of the 'vaccine hesitancy' identifying effective communication as key tool to dispel fears, address concerns and promote acceptance of vaccination...<sup>2</sup>

#### *Migration*

### **Immigrant disadvantage or the healthy immigrant effect? Evidence about low birth weight differences in the Czech Republic**

Martina Štípková Eur J Public Health (2016) 26 (4): 662-666 DOI: <http://dx.doi.org/10.1093/eurpub/ckw029> First published online: 26 April 2016 (5 pages)

#### *Surveys and monitoring*

### **Establishing and sustaining health observatories serving urbanized populations around the world: scoping study and survey**

Peter J. Aspinall, Bobbie Jacobson, Carlos Castillo-Salgado Eur J Public Health (2016) 26 (4): 681-686 DOI: <http://dx.doi.org/10.1093/eurpub/ckw007> First published online: 16 February 2016 (6 pages)

#### **Eurosurveillance**

Volume 21, Issue 33, 18 August 2016

<http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678>

[No relevant content identified]

#### **Global Health: Science and Practice (GHSP)**

June 2016 | Volume 4 | Issue 2

<http://www.ghspjournal.org/content/current>  
[Reviewed earlier]

### **Global Public Health**

Volume 11, Issue 7-8, 2016

<http://www.tandfonline.com/toc/rgph20/current>

***Special Issue: The trouble with 'Categories': Rethinking men who have sex with men, transgender and their equivalents in HIV prevention and health promotion***

[Reviewed earlier]

### **Globalization and Health**

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

[Accessed 20 August 2016]

[No new relevant content identified]

### **Health Affairs**

August 2016; Volume 35, Issue 8

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

***Disparities, Hospital Financing & More***

[New issue; No relevant content identified]

### **Health and Human Rights**

Volume 18, Issue 1, June 2016

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

***Special Section: Tuberculosis and the Right to Health***

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

[Reviewed earlier]

### **Health Economics, Policy and Law**

Volume 11 - Issue 03 - July 2016

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

[Reviewed earlier]

### **Health Policy and Planning**

Volume 31 Issue 7 September 2016

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

*Original Articles*

**[Inequality and inequity in healthcare utilization in urban Nepal: a cross-sectional observational study](#)**

Eiko Saito, Stuart Gilmour, Daisuke Yoneoka, Ghan Shyam Gautam, Md Mizanur Rahman, Pradeep Krishna Shrestha, and Kenji Shibuya

*Abstract*

Inequality in access to quality healthcare is a major health policy challenge in many low- and middle-income countries. This study aimed to identify the major sources of inequity in healthcare utilization using a population-based household survey from urban Nepal. A cross-sectional survey was conducted covering 9177 individuals residing in 1997 households in five municipalities of Kathmandu valley between 2011 and 2012. The concentration index was calculated and a decomposition method was used to measure inequality in healthcare utilization, along with a horizontal inequity index (HI) to estimate socioeconomic inequalities in healthcare utilization. Results showed a significant pro-rich distribution of general healthcare utilization in all service providers (Concentration Index: 0.062,  $P < 0.001$ ; HI: 0.029,  $P < 0.05$ ) and private service providers (Concentration Index: 0.070,  $P < 0.001$ ; HI: 0.030,  $P < 0.05$ ). The pro-rich distribution of probability in general healthcare utilization was attributable to inequalities in the level of household economic status (percentage contribution: 67.8%) and in the self-reported prevalence of non-communicable diseases such as hypertension (36.7%) and diabetes (14.4%). Despite the provision of free services by public healthcare providers, our analysis found no evidence of the poor making more use of public health services (Concentration Index: 0.041,  $P = 0.094$ ). Interventions to reduce the household economic burden of major illnesses, coupled with improvement in the management of public health facilities, warrant further attention by policy-makers.

### **Role of the private sector in vaccination service delivery in India: evidence from private-sector vaccine sales data, 2009–12**

Health Policy Plan. (2016) 31 (7): 884-896 doi:10.1093/heapol/czw008

Abhishek Sharma, Warren A Kaplan, Maulik Chokshi, and Sanjay P Zodpey

#### *Abstract*

**Objectives** PEPFAR's initial rapid scale-up approach was largely a vertical effort focused fairly exclusively on AIDS. The purpose of our research was to identify spill-over health system effects, if any, of investments intended to stem the HIV epidemic over a 6-year period with evidence from Uganda. The test of whether there were health system expansions (aside from direct HIV programming) was evidence of increases in utilization of non-HIV services—such as outpatient visits, in-facility births or immunizations—that could be associated with varying levels of PEPFAR investments at the district level.

**Methods** Uganda's Health Management Information System article-based records were available from mid-2005 onwards. We visited all 112 District Health offices to collect routine monthly reports (which contain data aggregated from monthly facility reports) and annual reports (which contain data aggregated from annual facility reports). Counts of individuals on anti-retroviral therapy (ART) at year-end served as our primary predictor variable. We grouped district-months into tertiles of high, medium or low PEPFAR investment based on their total reported number of patients on ART at the end of the year. We generated incidence-rate ratios, interpreted as the relative rate of the outcome measure in relation to the lowest investment PEPFAR tertile, holding constant control variables in the model.

**Results** We found PEPFAR investment overall was associated with small declines in service volumes in several key areas of non-HIV care (outpatient care for young children, TB tests and in-facility deliveries), after adjusting for sanitation, elementary education and HIV prevalence. For example, districts with medium and high ART investment had 11% fewer outpatient visits for children aged 4 and younger compared with low investment districts, incidence rate ratio (IRR) of 0.89 for high investment compared with low (95% CI, 0.85–0.94) and IRR of 0.93 for medium compared with low (0.90–0.96). Similarly, 22% fewer TB sputum tests were performed in high investment districts compared with low investment, [IRR 0.78 (0.72–0.85)] and 13%

fewer in medium compared with low, [IRR 0.88 (0.83–0.94)]. Districts with medium and high ART investment had 5% fewer in-facility deliveries compared with low investment districts [IRR 0.95 for high compared with low, (91–1.00) and 0.96 for medium compared with low (0.93–0.99)]. Although not statistically significant, the rate of maternal deaths in high investment district-months was 13% lower than observed in low investment districts.

**Conclusions** This study sought to understand whether PEPFAR, as a vertical programme, may have had a spill-over effect on the health system generally, as measured by utilization. Our conclusion is that it did not, at least not in Uganda.

### *Reviews*

#### **Performance of retail pharmacies in low- and middle-income Asian settings: a systematic review**

Rosalind Miller and Catherine Goodman

Health Policy Plan. (2016) 31 (7): 940-953 doi:10.1093/heapol/czw007

#### ***Abstract***

In low- and middle-income countries (LMIC) in Asia, pharmacies are often patients' first point of contact with the health care system and their preferred channel for purchasing medicines. Unfortunately, pharmacy practice in these settings has been characterized by deficient knowledge and inappropriate treatment. This paper systematically reviews both the performance of all types of pharmacies and drug stores across Asia's LMIC, and the determinants of poor practice, in order to reflect on how this could best be addressed. Poor pharmacy practice in Asia appears to have persisted over the past 30 years. We identify a set of inadequacies that occur at key moments throughout the pharmacy encounter, including: insufficient history taking; lack of referral of patients who require medical attention; illegal sale of a wide range of prescription only medicines without a prescription; sale of medicines that are either clinically inappropriate and/or in doses that are outside of the therapeutic range; sale of incomplete courses of antibiotics; and limited provision of information and counselling. In terms of determinants of poor practice, first knowledge was found to be necessary but not sufficient to ensure correct management of patients presenting at the pharmacy. This is evidenced by large discrepancies between stated and actual practice; little difference in the treatment behaviour of less and more qualified personnel and the failure of training programmes to improve practice to a satisfactory level. Second, we identified a number of profit maximizing strategies employed by pharmacy staff that can be linked to poor practices. Finally, whilst the research is relatively sparse, the regulatory environment appears to play an important role in shaping behaviour. Future efforts to improve the situation may yield more success than historical attempts, which have tended to concentrate on education, if they address the profit incentives faced by pharmacy personnel and the regulatory system.

### **Health Research Policy and Systems**

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

[Accessed 20 August 2016]

#### ***Research***

#### **Understanding collaboration in a multi-national research capacity-building partnership: a qualitative study**

*Research capacity building and its impact on policy and international research partnership is increasingly seen as important. High income and low- and middle-income countries frequently engage in research coll...*

Dinansha Varshney, Salla Atkins, Arindam Das and Vishal Diwan  
Health Research Policy and Systems 2016 14:64  
Published on: 18 August 2016

*Research*

**Communication channels to promote evidence-based practice: a survey of primary care clinicians to determine perceived effects**

*Research suggests that the channels through which evidence-based practices are communicated to healthcare professionals can shape the ways they engage with, and use, this information. For instance, there is ev...*

Ann Dadich and Hassan Hosseinzadeh  
Health Research Policy and Systems 2016 14:62  
Published on: 11 August 2016

**Human Vaccines & Immunotherapeutics** (formerly Human Vaccines)

Volume 12, Issue 5, 2016

<http://www.tandfonline.com/toc/khvi20/current>

[Reviewed earlier]

**Humanitarian Exchange Magazine**

Number 66 April 2016

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

***Special Focus: Humanitarian Innovation***

by Humanitarian Practice Network and Kim Scriven April 2016

[Reviewed earlier]

**Infectious Agents and Cancer**

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

[Accessed 20 August 2016]

*Research Article*

**Variability of high risk HPV genotypes among HIV infected women in Mwanza, Tanzania- the need for evaluation of current vaccine effectiveness in developing countries**

*High risk (HR) human papilloma Virus (HnPV) genotypes have been associated with cervical cancer. In Tanzania there is a limited data on the epidemiology of HPV and genotypes distribution among HIV infected women...*

Fridolin Mujuni, Mariam M. Mirambo, Peter Rambau, Korn Klaus, Muller Andreas, Dismas Matovelo, Mtebe Majigo, Christa Kasang and Stephen E. Mshana

Infectious Agents and Cancer 2016 11:49

Published on: 19 August 2016

**Infectious Diseases of Poverty**

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

[Accessed 20 August 2016]

*Scoping Review*

**Effectiveness of rotavirus vaccines against rotavirus infection and hospitalization in Latin America: systematic review and meta-analysis**

*Rotavirus was the leading cause of childhood diarrhoea-related hospitalisations and death before the introduction of rotavirus vaccines.*

Victor S. Santos, Daniella P. Marques, Paulo R. S. Martins-Filho, Luis E. Cuevas and Ricardo Q. Gurgel

Infectious Diseases of Poverty 2016 5:83

Published on: 12 August 2016

*Research Article*

**A practical community-based response strategy to interrupt Ebola transmission in sierra Leone, 2014–2015**

*The Ebola virus disease spread rapidly in West Africa in 2014, leading to the loss of thousands of lives. Community engagement was one of the key strategies to interrupt Ebola transmission, and practical commu...*

Zhong-Jie Li, Wen-Xiao Tu, Xiao-Chun Wang, Guo-Qing Shi, Zun-Dong Yin, Hai-Jun Su, Tao Shen, Da-Peng Zhang, Jian-Dong Li, Shan Lv, Chun-Li Cao, Rui-Qian Xie, Hong-Zhou Lu, Rong-Meng Jiang, Zheng Cao, Zhi-Jie An...

Infectious Diseases of Poverty 2016 5:74

Published on: 5 August 2016

*Research Article*

**Why is malaria associated with poverty? Findings from a cohort study in rural Uganda**

*Malaria control and sustainable development are linked, but implementation of 'multisectoral' intervention is restricted by a limited understanding of the causal pathways between poverty and malaria. We invest...*

Lucy S. Tusting, John Rek, Emmanuel Arinaitwe, Sarah G. Staedke, Moses R. Kamya, Jorge Cano, Christian Bottomley, Deborah Johnston, Grant Dorsey, Steve W. Lindsay and Jo Lines

Infectious Diseases of Poverty 2016 5:78

Published on: 4 August 2016

*Scoping Review*

**Major parasitic diseases of poverty in mainland China: perspectives for better control**

*Significant progress has been made in the prevention, control, and elimination of human parasitic diseases in China in the past 60 years. However, parasitic diseases of poverty remain major causes of morbidity...*

Jin-Lei Wang, Ting-Ting Li, Si-Yang Huang, Wei Cong and Xing-Quan Zhu

Infectious Diseases of Poverty 2016 5:67

Published on: 1 August 2016

**International Health**

Volume 8 Issue 4 July 2016

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

*EDITORIAL*



### **Polio eradication: no time for complacency**

Margaret Chan was rightly effusive in her praise of global leaders in her opening address at the 69th World Health Assembly in May 2016: 'During the short span of two weeks in April, 155 countries successfully switched from trivalent to bivalent oral polio vaccine, marking the largest coordinated vaccine withdrawal in history. I thank you and your country teams for this marvellous feat.' The global synchronised withdrawal of trivalent oral polio vaccine and its replacement with bivalent oral polio vaccine (OPV)—minus the type 2 polio strain—is certainly an extraordinary achievement worthy of acknowledgement. However, there is no time for resting on our laurels as any diminished effort at this critical point by the global community of political leaders, donors, health staff and volunteers would be catastrophic.

The goal of global interruption of polio transmission, boldly embraced almost three decades ago, has been tantalisingly close on a number of occasions, only to be thwarted by ill-performing health systems, global human mobility and diabolical conflicts that denied access to fundamental social services, including the protection of children against terrible diseases like ...

### **Editor's choice: Antimalarial mass drug administration: ethical considerations**

Phaik Yeong Cheah and Nicholas J White

Int. Health (2016) 8 (4): 235-238 doi:10.1093/inthealth/ihw027 `

#### *Abstract*

Falciparum malaria is a major cause of death and illness in tropical countries, particularly in childhood. In endemic countries, a significant proportion of the community is infected with malaria asymptomatically. One promising way to eliminate malaria is to give the entire population malaria treatment. This is called mass drug administration (MDA) and it raises a number of ethical issues, as possible long-term benefits are uncertain. The effectiveness of MDA is critically dependent on level of participation, so the promised benefits to the community can be annulled by non-participation of a small number of individuals. These potential benefits range a wide spectrum, from the permanent elimination of malaria (success) to a transient reduction in the prevalence of infection and the incidence of illness (failure). The drawbacks of MDA are: inconvenience, potential toxicity, loss of confidence in the elimination campaign, possible drug resistance (though highly unlikely), and the potential for a rebound of malaria illness (if immunity is lost and malaria is reintroduced later). Other ethical issues are related to balancing individual and public health interests, and potentially limiting individual autonomy by making MDA compulsory.

### **Perspective and investments in health system strengthening of Gavi, the Vaccine Alliance: a content analysis of health system strengthening-specific funding**

Feng-Jen Tsai, Howard Lee, and Victoria Y. Fan

Int. Health (2016) 8 (4): 246-252 doi:10.1093/inthealth/ihv063

#### *Abstract*

**Background** This paper aimed to compare the health systems strengthening (HSS) framework of Gavi and WHO and to analyze resource allocation in HSS by Gavi.

**Methods** Among 76 countries which received HSS funding from Gavi from 2006 to 2013, summary reports of 44 countries and approved proposals of 10 countries were collected. After comparing the HSS framework of WHO and Gavi, each activity described in documents was categorized according to Gavi's framework and funding allocation was analyzed.

**Results** Compared with WHO's HSS framework, Gavi's has a distinctive function within the building block 'Drugs, Equipment, Supplies, Facilities' and a distinctive function of 'providing incentive and bonuses' under the building block 'Human Resource/Performance Management'.

Gavi has steadily invested 10% of their total budget on HSS, but 47% were allocated in these categories, whereas 78% were for activities arguably not covered by WHO's HSS framework. In Africa, 70% of Gavi's budget fell under 'Drugs, Equipment, Supplies, Facilities' and 92.8% were for activities arguably not deemed as HSS by WHO.

Conclusions Gavi's HSS support emphasized inputs with short-term measurable outcomes. Harmonization of the concept of HSS and collaboration between Gavi and multilateral international agencies, such as World Bank and WHO, are needed.

### **International Journal of Epidemiology**

Volume 45 Issue 2 April 2016

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

[Reviewed earlier]

### **International Journal of Infectious Diseases**

July 2016 Volume 48, p1-124 Open Access

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

[Reviewed earlier]

### **JAMA**

August 16, 2016, Vol 316, No. 7

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

[New issue; No new relevant content identified]

August 9, 2016, Vol 316, No. 6

[New issue; No new relevant content identified]

August 2, 2016, Vol 316, No. 5

*Special Communication*

**[United States Health Care Reform: Progress to Date and Next Steps](#)** FREE

Barack Obama, JD

*Editorials:*

The Affordable Care Act and the Future of US Health Care; Howard Bauchner, MD

US Health Care Reform: Cost Containment and Quality Improvement; Peter R. Orszag, PhD

Reassessing the Future of the Affordable Care Act; Stuart M. Butler, PhD, MA

The Past and Future of the Affordable Care Act; Jonathan Skinner, PhD; Amitabh Chandra, PhD

### **JAMA Pediatrics**

August 2016, Vol 170, No. 8

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

*Editorial*

**[Digital Support for Childbirth in Developing Countries: Seeds of Hope in an Evidential Desert](#)**

Claudia Pagliari, PhD, FRCPE

*Original Investigation*

**Association Between the Safe Delivery App and Quality of Care and Perinatal Survival in Ethiopia: A Randomized Clinical Trial**

Stine Lund, MD, PhD; Ida Marie Boas, MSc; Tariku Bedesa, BSc; Wondewossen Fekede, BSc; Henriette Svarre Nielsen, MD, PhD; Bjarke Lund Sørensen, MD, PhD

*Special Communication*

**What Does Zika Virus Mean for the Children of the Americas?** FREE

Peter J. Hotez, MD, PhD

**Prevention of Congenital Disorders and Care of Affected Children: A Consensus Statement**

Gary L. Darmstadt, MD; Christopher P. Howson, PhD; Gijs Walraven, MD; Robert W. Armstrong, MD; Hannah K. Blencowe, MBChB; Arnold L. Christianson, FRCP Edin; Alastair Kent, MPhil; Helen Malherbe, MSc; Jeffrey C. Murray, MD; Carmencita D. Padilla, MD; Salimah R. Walani, PhD; for the Participant Working Group of the Dar es Salaam Seventh International Conference on Birth Defects and Disabilities in the Developing World

**Journal of Community Health**

Volume 41, Issue 4, August 2016

<http://link.springer.com/journal/10900/41/3/page/1>

[Reviewed earlier]

**Journal of Epidemiology & Community Health**

July 2016, Volume 70, Issue 7

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

[Reviewed earlier]

**Journal of Global Ethics**

Volume 12, Issue 2, 2016

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

*Research Article*

**The ethical principles of effective altruism**

Anthony Skelton

07 Aug 2016

*Research Article*

**Philanthropy, cosmopolitanism, and the benefits of giving directly**

Timothy Weidel

07 Aug 2016

*Research Article*

**Humanitarian intervention and historical responsibility**

Fredrik D. Hjorthen & Göran Duus-Otterström

07 Aug 2016

*Research Article*

**The refugee's flight: homelessness, hospitality, and care of the self**

Inna Viriasova

07 Aug 2016

**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>

[New issue; No new relevant content identified]

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

Volume 27, Number 2, May 2016 Supplement

<https://muse.jhu.edu/issue/33442>

[Reviewed earlier]

**Journal of Immigrant and Minority Health**

Volume 18, Issue 4, August 2016

<http://link.springer.com/journal/10903/18/4/page/1>

***Issue focus: Mental Health and Substance Use***

**Journal of Immigrant & Refugee Studies**

Volume 14, Issue 2, 2016

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

[Reviewed earlier]

**Journal of Infectious Diseases**

Volume 214 Issue 3 August 1, 2016

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

[Reviewed earlier]

**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**

August 2016, Volume 42, Issue 8

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

*Current controversy*

**Adolescent autonomy revisited: clinicians need clearer guidance**

Joe Brierley, Victor Larcher

J Med Ethics 2016;42:482-485 Published Online First: 21 March 2016 doi:10.1136/medethics-2014-102564

*Abstract*

In 1996, Brazier and Bridge raised the question 'is adolescent autonomy truly dead and buried' following judicial decisions which had seemed to reverse the Gillick-inspired trend for greater child autonomy in healthcare. Subsequent decisions by the courts have reinforced the view that those below 18 years in England and Wales remain children with limited rights to refuse treatment compared with adults. This is at variance with the daily experience of those working with young people who increasingly seek to actively involve them in making freely informed decisions about their healthcare, in accordance with the principles enunciated in the UN Convention of the Rights of the Child and the UK Children Acts. We review the derivation of the law in England and Wales in this area, in the light of another recent family court judgement enforcing treatment on a 'competent' child without his or her consent and ask: 'How can the Common Law and the ethical practice of those caring for young people have diverged so far?' Either young people can decide whether to have a recommended treatment, or they cannot. Given Ian McEwan's book, the Children Act, has stimulated wider social debate in this area might this be an opportune moment to seek public policy resolution with regards to healthcare decision making by young people? We argue that events since the Gillick case have underlined the need for a comprehensive review of legal policy and practice in this area. While absolute autonomy and freedom of choice are arguably inconsistent with the protection rights that society has agreed are owed to children, healthcare practitioners need clarity over the circumstances in which society expects that autonomous choices of adolescents can be overridden.

**Journal of Medical Internet Research**

Vol 18, No 7 (2016): July

<http://www.jmir.org/2016/7>

[Reviewed earlier]

**Journal of Medical Microbiology**

Volume 65, Issue 6, June 2016

<http://jmm.microbiologyresearch.org/content/journal/jmm/65/6;jsessionid=1lt6u71kmvfue.x-sgm-live-02>

[Reviewed earlier]

**Journal of Patient-Centered Research and Reviews**

Volume 3, Issue 3 (2016)

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

*Supplements*

**A Systematic Review of Conceptual Frameworks of Medical Complexity and New Model Development**

Leah Zullig, Heather E. Whitson, S. Nicole Hastings, Christopher Beadles, Julia Krauchanka, Igor Akushevich, and Matthew Maciejewski

### **Journal of the Pediatric Infectious Diseases Society (JPIDS)**

Volume 5 Issue 3 September 2016

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

ORIGINAL ARTICLES AND COMMENTARIES

#### **[Effectiveness of the 10-Valent Pneumococcal Nontypeable Haemophilus influenzae Protein D–Conjugated Vaccine \(PHiD-CV\) Against Carriage and Acute Otitis Media—A Double-Blind Randomized Clinical Trial in Finland](#)**

Timo Vesikari, Aino Forsten, Ilkka Seppä, Tarja Kaijalainen, Taneli Puumalainen, Anu Soininen, Magali Traskine, Patricia Lommel, Sonia Schoonbroodt, Marjan Hezareh, Marta Moreira, Dorota Borys, and Lode Schuerman

J Ped Infect Dis (2016) 5 (3): 237-248 doi:10.1093/jpids/piw010

#### **[Immunogenicity of Two Different Sequential Schedules of Inactivated Polio Vaccine Followed by Oral Polio Vaccine Versus Oral Polio Vaccine Alone in Healthy Infants in China](#)**

Rong-Cheng Li, Chang-Gui Li, Hai-Bo Wang, Hui-Min Luo, Yan-Ping Li, Jian-Feng Wang, Zhi-Fang Ying, Wen-Zhou Yu, Jean Denis Shu, Ning Wen, and Emmanuel Vidor

J Ped Infect Dis (2016) 5 (3): 287-296 doi:10.1093/jpids/piv017

### **Journal of Pediatrics**

August 2016 Volume 175, p1-250

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

[New issue; No relevant content identified]

### **Journal of Public Health Policy**

Volume 37, Issue 3, August 2016

<http://link.springer.com/journal/41271/37/3/page/1>

*Review Article*

#### **[Management and control of multidrug-resistant tuberculosis \(MDR-TB\): Addressing policy needs for India](#)**

Sachin R Atre, Megan B Murray

*Commentary*

#### **[Rethinking how to address the world's largest infectious killer in the world's largest country](#)**

Barry R Bloom

*Abstract*

India has the largest number of people suffering from tuberculosis (TB) of any country in the world. Analysis of the increasing Multi-Drug Resistant TB problem has revealed multiple challenges to the health system that must be addressed in order to control the TB epidemic there.

*Original Article*

**[Accelerating access to new medicines: Current status of facilitated regulatory pathways used by emerging regulatory authorities](#)**

Lawrence Liberti, Alasdair Breckenridge, Jarno Hoekman...

*Abstract*

Objectives: We assessed the characteristics of currently implemented expedited (facilitated) regulatory pathways (FRPs) used by national regulatory authorities (NRAs) in emerging economies to speed access to important new medicines.

Methods: We identified NRAs with FRPs through Thomson Reuters Cortellis Regulatory Intelligence and through agency Websites. We developed a list of 27 FRP characteristics. We categorised characteristics as procedural or substantive and based them on five sequential regulatory activities.

Findings: We assessed 29 countries with 33 FRPs. The regions with the characteristics described most extensively by their FRPs were the Middle East/North Africa and Eastern Europe. The Sub-Saharan African region included the FRPs that were least specific in describing characteristics. Overall, FRPs presented at least twice as many procedural as substantive characteristics.

Conclusions: We observed diversity by region in FRP characteristics, suggesting a role for further engagement with emerging NRAs in their design and implementation. Common processes could advance regulatory alignment initiatives and help the WHO inform the development of novel, globally aligned accelerated development and regulatory pathways for products that fulfil serious unmet public health needs.

*Original Article*

**[A review of health literacy: Definitions, interpretations, and implications for policy initiatives](#)**

Leslie J Malloy-Weir, Cathy Charles, Amiram Gafni...

**Journal of the Royal Society – Interface**

01 June 2016; volume 13, issue 119

<http://rsif.royalsocietypublishing.org/content/current>

[Reviewed earlier]

**Journal of Virology**

July 2016, volume 90, issue 14

<http://jvi.asm.org/content/current>

[Reviewed earlier]

**The Lancet**

Aug 20, 2016 Volume 388 Number 10046 p731-840

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

*Articles*

**[Global and regional effects of potentially modifiable risk factors associated with acute stroke in 32 countries \(INTERSTROKE\): a case-control study](#)**



Martin J O'Donnell, Siu Lim Chin, Sumathy Rangarajan, Denis Xavier, Lisheng Liu, Hongye Zhang, Purnima Rao-Melacini, Xiaohe Zhang, Prem Pais, Steven Agapay, Patricio Lopez-Jaramillo, Albertino Damasceno, Peter Langhorne, Matthew J McQueen, Annika Rosengren, Mahshid Dehghan, Graeme J Hankey, Antonio L Dans, Ahmed Elsayed, Alvaro Avezum, Charles Mondo, Hans-Christoph Diener, Danuta Ryglewicz, Anna Czlonkowska, Nana Pogossova, Christian Weimar, Romaina Iqbal, Rafael Diaz, Khalid Yusoff, Afzalhussein Yusufali, Aytekin Oguz, Xingyu Wang, Ernesto Penaherrera, Fernando Lanas, Okechukwu S Ogah, Adesola Ogunniyi, Helle K Iversen, German Malaga, Zvonko Rumboldt, Shahram Oveisgharan, Fawaz Al Hussain, Daliwonga Magazi, Yongchai Nilanont, John Ferguson, Guillaume Pare, Salim Yusuf, INTERSTROKE investigators

**Body-mass index and all-cause mortality: individual-participant-data meta-analysis of 239 prospective studies in four continents**

The Global BMI Mortality Collaboration  
Open Access

Aug 13, 2016 Volume 388 Number 10045 p633-730

*Editorial*

**Refugee and migrant crisis: the deficient global response**

The Lancet

DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31342-3](http://dx.doi.org/10.1016/S0140-6736(16)31342-3)

Aug 19, 2016, marks World Humanitarian Day, a global campaign to celebrate humanitarianism and mobilise people to advocate for a more humane world. It is a time to take stock of the needs of vulnerable populations living in challenging environments worldwide and international collaboration towards meeting those needs. It is therefore an opportunity to reflect on the global response to one of the greatest health and humanitarian crises of our time, that of refugees and migrants.

In 2015, there were 244 million migrants and 65 million people who were forcibly displaced, including more than 21 million refugees, 3 million asylum seekers, and more than 40 million internally displaced persons. On Sept 19, 2016, at the UN General Assembly in New York, the first High-Level Summit on addressing large movements of refugees and migrants will be hosted by UN Secretary-General Ban Ki-moon, with the aim of securing a more coordinated and humane approach to the crises affecting this population.

On Aug 2, a draft political declaration for adoption at the summit was released. The document reaffirms and reiterates obligations under several existing agreements, including the UN Charter, the Universal Declaration of Human Rights, and the 1951 Refugee Convention. It is true that countries need to be reminded of these important documents and their existing obligations. However, as critics have noted, the draft declaration is deficient on several fronts. Problems include the fact that it is not legally binding, it contains few concrete commitments or new obligations, and its language is often vague (the wording of every sentence has been negotiated). Definitive action has been deferred to 2018 when a Global Compact on refugees and a Global Compact for safe, orderly, and regular migration will be agreed by UN member states. Such a delay on a comprehensive plan is scandalous considering the many immediate and unmet needs of millions of refugees and migrants worldwide.

On health care, some statements are promising. The draft declaration states that countries will provide access to sexual and reproductive health-care services and they will combat sexual and gender-based violence “to the greatest extent possible”. Civil society and non-governmental organisations will have to monitor such declarations for compliance. On other health issues, the document is weak. For example, it merely promises to “encourage States to address the vulnerabilities to HIV and the specific healthcare needs experienced by migrant and mobile populations, as well as by refugees and crisis-affected populations”. This response to health and wellbeing in this population is disappointing and deeply unsatisfactory.

Despite the weakness of the draft declaration, some observers have praised any traction in a climate of hostility and xenophobia towards refugees and migrants in many countries. Others look hopefully towards the outcomes of an event related to the High-Level Summit, the Leaders' Summit on Refugees on Sept 20, which is being hosted by US President Barack Obama at the UN General Assembly. The meeting will ask governments to pledge significant new commitments for refugees.

However, several countries are already failing in a compassionate response to refugees and migrants in need, some atrociously. Last week, Human Rights Watch and Amnesty International highlighted the serious abuse, inhumane treatment, and neglect of around 1200 refugees (men, women, and children) on Nauru, the Pacific Island nation being used by Australia to detain asylum seekers attempting to reach its mainland by sea. In the UK, little has happened to help unaccompanied child refugees in Europe to safety, despite an amendment to the Immigration Act 3 months ago that allowed these children to live in the UK. And, although Germany is the European country that has allowed the largest number of refugees to settle there, many have inadequate access to health care (see World Report).

Next month's UN High-Level Summit on addressing large movements of refugees and migrants comes a year after governments agreed the Sustainable Development Goals, an agenda for action for 2016–30. Two central tenets of that agreement were to “leave no one behind” and to “endeavour to reach the furthest behind first”. Refugees and migrants represent one of the most vulnerable populations on the planet today. Not protected by citizenship, escaping conflict, violence, persecution, or poverty, they have the same aspirations of any human being—safety, good health, and opportunities for a better future. They are reliant on the international community to help them realise such an existence. Sadly, on current assessment, it is failing them

Aug 06, 2016 Volume 388 Number 10044 p533-632

*Series*

*UHC: markets, profit, and the public good*

**What is the private sector? Understanding private provision in the health systems of low-income and middle-income countries**

Maureen Mackintosh, Amos Channon, Anup Karan, Sakthivel Selvaraj, Eleonora Cavagnero, Hongwen Zhao

*UHC: markets, profit, and the public good*

**Performance of private sector health care: implications for universal health coverage**

Rosemary Morgan, Tim Ensor, Hugh Waters

*UHC: markets, profit, and the public good*

**Prohibit, constrain, encourage, or purchase: how should we engage with the private health-care sector?**

Dominic Montagu, Catherine Goodman

*UHC: markets, profit, and the public good*

**Managing the public–private mix to achieve universal health coverage**

Barbara McPake, Kara Hanson

**Lancet Global Health**

Sep 2016 Volume 4 Number 9 e579-e662

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

*Comment*

**Infection-related cancers: prioritising an important and eliminable contributor to the global cancer burden**

Corey Casper, Christina Fitzmaurice

**Trends in immunisation inequity: evidence, rights, and planning**

Enrique Delamonica

**Edging ever closer to polio eradication**

Robert Booy, Mohamed Tashani

*Articles*

**Global burden of cancers attributable to infections in 2012: a synthetic analysis**

Martyn Plummer, Catherine de Martel, Jerome Vignat, Jacques Ferlay, Freddie Bray, Silvia Franceschi

**State of inequality in diphtheria-tetanus-pertussis immunisation coverage in low-income and middle-income countries: a multicountry study of household health surveys**

Ahmad Reza Hosseinpour, Nicole Bergen, Anne Schlottheuber, Marta Gacic-Dobo, Peter M Hansen, Kamel Senouci, Ties Boerma, Aluisio J D Barros

*Summary*

Background

Immunisation programmes have made substantial contributions to lowering the burden of disease in children, but there is a growing need to ensure that programmes are equity-oriented. We aimed to provide a detailed update about the state of between-country inequality and within-country economic-related inequality in the delivery of three doses of the combined diphtheria, tetanus toxoid, and pertussis-containing vaccine (DTP3), with a special focus on inequalities in high-priority countries.

Methods

We used data from the latest available Demographic and Health Surveys and Multiple Indicator Cluster Surveys done in 51 low-income and middle-income countries. Data for DTP3 coverage were disaggregated by wealth quintile, and inequality was calculated as difference and ratio measures based on coverage in richest (quintile 5) and poorest (quintile 1) household wealth

quintiles. Excess change was calculated for 21 countries with data available at two timepoints spanning a 10 year period. Further analyses were done for six high-priority countries—ie, those with low national immunisation coverage and/or high absolute numbers of unvaccinated children. Significance was determined using 95% CIs.

#### Findings

National DTP3 immunisation coverage across the 51 study countries ranged from 32% in Central African Republic to 98% in Jordan. Within countries, the gap in DTP3 immunisation coverage suggested pro-rich inequality, with a difference of 20 percentage points or more between quintiles 1 and 5 for 20 of 51 countries. In Nigeria, Pakistan, Laos, Cameroon, and Central African Republic, the difference between quintiles 1 and 5 exceeded 40 percentage points. In 15 of 21 study countries, an increase over time in national coverage of DTP3 immunisation was realised alongside faster improvements in the poorest quintile than the richest. For example, in Burkina Faso, Cambodia, Gabon, Mali, and Nepal, the absolute increase in coverage was at least 2·0 percentage points per year, with faster improvement in the poorest quintile. Substantial economic-related inequality in DTP3 immunisation coverage was reported in five high-priority study countries (DR Congo, Ethiopia, Indonesia, Nigeria, and Pakistan), but not Uganda.

#### Interpretation

Overall, within-country inequalities in DTP3 immunisation persist, but seem to have narrowed over the past 10 years. Monitoring economic-related inequalities in immunisation coverage is warranted to reveal where gaps exist and inform appropriate approaches to reach disadvantaged populations.

#### Funding

None.

### **Effect of democratic reforms on child mortality: a synthetic control analysis**

Hannah Pieters, Daniele Curzi, Alessandro Olper, Johan Swinnen

### **Chronic disease outcomes after severe acute malnutrition in Malawian children (ChroSAM): a cohort study**

Natasha Lelijveld, Andrew Seal, Jonathan C Wells, Jane Kirkby, Charles Opondo, Emmanuel Chimwezi, James Bunn, Robert Bandsma, Robert S Heyderman, Moffat J Nyirenda, Marko Kerac

## **The Lancet Infectious Diseases**

Sep 2016 Volume 16 Number 9 p981-1084 e178-e201

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

#### *Editorial*

### **Time to take sexually transmitted infections seriously**

The Lancet Infectious Diseases

#### *Comment*

### **Maternal influenza immunisation in resource-limited settings**

Odile Launay, Vassilis Tsatsaris

#### Open Access

Pregnant women and young infants are at high risk of developing severe influenza.<sup>1,2</sup> Among infants, those younger than 6 months have the highest risk of developing complications associated with influenza;<sup>3</sup> however, antiviral treatments and influenza vaccines are not

approved in this age group. Given that influenza vaccines administered to pregnant women have shown a good safety profile<sup>4</sup> and efficacy to prevent influenza in infants younger than 6 months,<sup>5,6</sup> maternal immunisation seems to be an important strategy to protect both pregnant women and their infants.

### **Yellow fever vaccination coverage heterogeneities in Luanda province, Angola**

Maimuna S Majumder, Colleen M Nguyen, Sumiko R Mekaru, John S Brownstein

#### *Articles*

### **Maternal immunisation with trivalent inactivated influenza vaccine for prevention of influenza in infants in Mali: a prospective, active-controlled, observer-blind, randomised phase 4 trial**

Milagritos D Tapia, Samba O Sow, Boubou Tamboura, Ibrahima Tégouet, Marcela F Pasetti, Mamoudou Kodio, Uma Onwuchekwa, Sharon M Tennant, William C Blackwelder, Flanon Coulibaly, Awa Traoré, Adama Mamby Keita, Fadima Cheick Haidara, Fatoumata Diallo, Moussa Doumbia, Doh Sanogo, Ellen DeMatt, Nicholas H Schluterman, Andrea Buchwald, Karen L Kotloff, Wilbur H Chen, Evan W Orenstein, Lauren A V Orenstein, Julie Villanueva, Joseph Bresee, John Treanor, Myron M Levine

1026

Open Access

### **Safety, tolerability, and immunogenicity of a recombinant toxic shock syndrome toxin (rTSST)-1 variant vaccine: a randomised, double-blind, adjuvant-controlled, dose escalation first-in-man trial**

Michael Schwameis, Bernhard Roppenser, Christa Firbas, Corina S Gruener, Nina Model, Norbert Stich, Andreas Roetzer, Nina Buchtele, Bernd Jilma, Martha M Eibl

### **Maternal and Child Health Journal**

Volume 20, Issue 8, August 2016

<http://link.springer.com/journal/10995/20/8/page/1>

[Reviewed earlier]

### **Medical Decision Making (MDM)**

July 2016; 36 (5)

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

[Reviewed earlier]

### **The Milbank Quarterly**

*A Multidisciplinary Journal of Population Health and Health Policy*

June 2016 Volume 94, Issue 2 Pages 225–435

<http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2016.94.issue-2/issuetoc>

[Reviewed earlier]

### **Nature**

Volume 536 Number 7616 pp249-368 18 August 2016

[http://www.nature.com/nature/current\\_issue.html](http://www.nature.com/nature/current_issue.html)

*Editorial*

### **[Rare rewards](#)**

A catalogue of genetic information from some 60,000 people reveals unexpected surprises — and highlights the need to make genomic data publicly accessible to aid studies of rare diseases.

*Articles*

### **[Analysis of protein-coding genetic variation in 60,706 humans](#)** [Open](#)

Monkol Lek, Konrad J. Karczewski, Eric V. Minikel, Kaitlin E. Samocha, Eric Banks [+ et al.](#)

*Exome sequencing data from 60,706 people of diverse geographic ancestry is presented, providing insight into genetic variation across populations, and illuminating the relationship between DNA variants and human disease.*

*Abstract*

Large-scale reference data sets of human genetic variation are critical for the medical and functional interpretation of DNA sequence changes. Here we describe the aggregation and analysis of high-quality exome (protein-coding region) DNA sequence data for 60,706 individuals of diverse ancestries generated as part of the Exome Aggregation Consortium (ExAC). This catalogue of human genetic diversity contains an average of one variant every eight bases of the exome, and provides direct evidence for the presence of widespread mutational recurrence. We have used this catalogue to calculate objective metrics of pathogenicity for sequence variants, and to identify genes subject to strong selection against various classes of mutation; identifying 3,230 genes with near-complete depletion of predicted protein-truncating variants, with 72% of these genes having no currently established human disease phenotype. Finally, we demonstrate that these data can be used for the efficient filtering of candidate disease-causing variants, and for the discovery of human 'knockout' variants in protein-coding genes.

## **Nature Medicine**

August 2016, Volume 22 No 8 pp823-961

<http://www.nature.com/nm/journal/v22/n8/index.html>

*Editorial*

### **[How to encourage trial reporting](#) - p823**

doi:10.1038/nm.4167

Reporting of data from clinical trials comes slowly or not at all. Impending regulations in the US promise to improve the situation, but full compliance will require better incentives from institutions and a greater understanding that reporting data does not jeopardize the publication of results.

*Perspective*

### **[International AIDS Society global scientific strategy: towards an HIV cure 2016](#)** - pp839 - 850

Steven G Deeks, Sharon R Lewin, Anna Laura Ross, Jintanat Ananworanich, Monsef Benkirane, Paula Cannon, Nicolas Chomont, Daniel Douek, Jeffrey D Lifson, Ying-Ru Lo, Daniel Kuritzkes, David Margolis, John Mellors, Deborah Persaud, Joseph D Tucker, Françoise Barre-Sinoussi, International AIDS Society Towards a Cure Working Group, Galit Alter, Judith Auerbach, Brigitte

Autran, Dan H Barouch, Georg Behrens, Marina Cavazzana, Zhiwei Chen, Éric A Cohen, Giulio Maria Corbelli, Serge Eholié, Nir Eyal, Sarah Fidler, Laurindo Garcia, Cynthia Grossman, Gail Henderson, Timothy J Henrich, Richard Jefferys, Hans-Peter Kiem, Joseph McCune, Keymanthri Moodley, Peter A Newman, Monique Nijhuis, Moses Supercharger Nsubuga, Melanie Ott, Sarah Palmer, Douglas Richman, Asier Saez-Cirion, Matthew Sharp, Janet Siliciano, Guido Silvestri, Jerome Singh, Bruno Spire, Jeffrey Taylor, Martin Tolstrup, Susana Valente, Jan van Lunzen, Rochelle Walensky, Ira Wilson & Jerome Zack  
doi:10.1038/nm.4108

*The International AIDS Society Towards a Cure Working Group lays out its scientific strategy to achieve a cure for HIV.*

#### **Abstract**

Antiretroviral therapy is not curative. Given the challenges in providing lifelong therapy to a global population of more than 35 million people living with HIV, there is intense interest in developing a cure for HIV infection. The International AIDS Society convened a group of international experts to develop a scientific strategy for research towards an HIV cure. This Perspective summarizes the group's strategy.

### **Nature Reviews Immunology**

August 2016 Vol 16 No 8

<http://www.nature.com/nri/journal/v16/n8/index.html>

#### **Perspectives**

##### **Essay**

#### **Immunity by equilibrium**

Gérard Eberl

p524 | doi:10.1038/nri.2016.75

*In this Essay, Gérard Eberl presents a model of immunity that is based on an equilibrium between four types of immune response. Alteration of the internal or microbial environment leads to immune disequilibrium and determines immune protection or pathology.*

#### **Abstract**

The classical model of immunity posits that the immune system reacts to pathogens and injury and restores homeostasis. Indeed, a century of research has uncovered the means and mechanisms by which the immune system recognizes danger and regulates its own activity. However, this classical model does not fully explain complex phenomena, such as tolerance, allergy, the increased prevalence of inflammatory pathologies in industrialized nations and immunity to multiple infections. In this Essay, I propose a model of immunity that is based on equilibrium, in which the healthy immune system is always active and in a state of dynamic equilibrium between antagonistic types of response. This equilibrium is regulated both by the internal milieu and by the microbial environment. As a result, alteration of the internal milieu or microbial environment leads to immune disequilibrium, which determines tolerance, protective immunity and inflammatory pathology.

### **New England Journal of Medicine**

August 18, 2016 Vol. 375 No. 7

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

[New issue; No relevant content identified]



## **Pediatrics**

August 2016, VOLUME 138 / ISSUE 2

<http://pediatrics.aappublications.org/content/138/2?current-issue=y>

### *Articles*

#### **Safety Profile of the 9-Valent HPV Vaccine: A Combined Analysis of 7 Phase III Clinical Trials**

Edson D. Moreira, Stan L. Block, Daron Ferris, Anna R. Giuliano, Ole-Erik Iversen, Elmar A. Joura, Pope Kosalaraksa, Andrea Schilling, Pierre Van Damme, Jacob Bornstein, F. Xavier Bosch, Sophie Pils, Jack Cuzick, Suzanne M. Garland, Warner Huh, Susanne K. Kjaer, Hong Qi, Donna Hyatt, Jason Martin, Erin Moeller, Michael Ritter, Martine Baudin, Alain Luxembourg  
Pediatrics Aug 2016, 138 (2) e20154387; DOI: 10.1542/peds.2015-4387

### *Abstract*

**OBJECTIVES:** The overall safety profile of the 9-valent human papillomavirus (9vHPV) vaccine was evaluated across 7 Phase III studies, conducted in males and females (nonpregnant at entry), 9 to 26 years of age.

**METHODS:** Vaccination was administered as a 3-dose regimen at day 1, and months 2 and 6. More than 15 000 subjects received  $\geq 1$  dose of 9vHPV vaccine. In 2 of the studies, >7000 control subjects received  $\geq 1$  dose of quadrivalent HPV (qHPV) vaccine. Serious and nonserious adverse events (AEs) and new medical conditions were recorded throughout the study. Subjects testing positive for pregnancy at day 1 were not vaccinated; those who became pregnant after day 1 were discontinued from further vaccination until resolution of the pregnancy. Pregnancies detected after study start ( $n = 2950$ ) were followed to outcome.

**RESULTS:** The most common AEs ( $\geq 5\%$ ) experienced by 9vHPV vaccine recipients were injection-site AEs (pain, swelling, erythema) and vaccine-related systemic AEs (headache, pyrexia). Injection-site AEs were more common in 9vHPV vaccine than qHPV vaccine recipients; most were mild-to-moderate in intensity. Discontinuations and vaccine-related serious AEs were rare (0.1% and <0.1%, respectively). Seven deaths were reported; none were considered vaccine related. The proportions of pregnancies with adverse outcome were within ranges reported in the general population.

**CONCLUSIONS:** The 9vHPV vaccine was generally well tolerated in subjects aged 9 to 26 years with an AE profile similar to that of the qHPV vaccine; injection-site AEs were more common with 9vHPV vaccine. Its additional coverage and safety profile support widespread 9vHPV vaccination.

#### **Awareness of HPV and Uptake of Vaccination in a High-Risk Population**

Jessica Fishman, Lynne Taylor, Ian Frank

Pediatrics Aug 2016, 138 (2) e20152048; DOI: 10.1542/peds.2015-2048

### *Abstract*

**BACKGROUND:** Immunization against the human papillomavirus (HPV) is effective at preventing HPV-related cancers, but vaccination rates have remained low. Levels of awareness could conceivably influence vaccination rates, but currently the relationship is unknown. This is the first study to test how strongly levels of awareness among parents and adolescents are related to subsequent HPV vaccination among a high-risk population of adolescents.

**METHODS:** This longitudinal cohort study measured baseline levels of awareness (about HPV, cervical cancer, HPV vaccination, and news or advertisements about HPV vaccination) among parents of adolescents and also a separate sample of adolescents. Participants resided in predominantly low-income, African American neighborhoods of a large American city. During a

12-month follow-up period, the outcome measures were defined as adolescent receipt of any HPV vaccination, as measured by clinic records.

RESULTS: Within 1 year, <16% of adolescents received vaccination. The relationship between awareness and subsequent vaccination was either not statistically significant or not meaningful in magnitude, with  $R^2 = 0.004$  to  $0.02$ . The predicted probability of getting vaccination was  $<0.50$  for all awareness levels and prediction accuracy was poor (area under the curve =  $0.56-0.64$ ).

CONCLUSIONS: In this high-risk population, levels of awareness among parents and adolescents were not substantially related to subsequent adolescent HPV vaccination.

### **Informed Consent in Decision-Making in Pediatric Practice**

COMMITTEE ON BIOETHICS

Pediatrics Aug 2016, 138 (2) e20161484; DOI: 10.1542/peds.2016-1484

#### *Abstract*

Informed consent should be seen as an essential part of health care practice; parental permission and childhood assent is an active process that engages patients, both adults and children, in health care. Pediatric practice is unique in that developmental maturation allows, over time, for increasing inclusion of the child's and adolescent's opinion in medical decision-making in clinical practice and research.

### **Informed Consent in Decision-Making in Pediatric Practice**

Aviva L. Katz, Sally A. Webb, COMMITTEE ON BIOETHICS

Pediatrics Aug 2016, 138 (2) e20161485; DOI: 10.1542/peds.2016-1485

#### *Abstract*

Informed consent should be seen as an essential part of health care practice; parental permission and childhood assent is an active process that engages patients, both adults and children, in their health care. Pediatric practice is unique in that developmental maturation allows, over time, for increasing inclusion of the child's and adolescent's opinion in medical decision-making in clinical practice and research. This technical report, which accompanies the policy statement "Informed Consent in Decision-Making in Pediatric Practice" was written to provide a broader background on the nature of informed consent, surrogate decision-making in pediatric practice, information on child and adolescent decision-making, and special issues in adolescent informed consent, assent, and refusal. It is anticipated that this information will help provide support for the recommendations included in the policy statement.

### **The Importance of Social Networking in a National Polio Vaccine Campaign**

Lisa Rubin, Keren Landsman

Pediatrics Aug 2016, 138 (2) e20154658; DOI: 10.1542/peds.2015-4658

### **Pharmaceutics**

Volume 8, Issue 2 (June 2016)

<http://www.mdpi.com/1999-4923/8/2>

[Reviewed earlier]

### **PharmacoEconomics**

Volume 34, Issue 9, September 2016

<http://link.springer.com/journal/40273/34/9/page/1>

*Systematic Review*

## **Cost Effectiveness of HPV Vaccination: A Systematic Review of Modelling Approaches**

Joshua Pink, Ben Parker, Stavros Petrou

*Abstract*

**Background**

A large number of economic evaluations have been published that assess alternative possible human papillomavirus (HPV) vaccination strategies. Understanding differences in the modelling methodologies used in these studies is important to assess the accuracy, comparability and generalisability of their results.

**Objectives**

The aim of this review was to identify published economic models of HPV vaccination programmes and understand how characteristics of these studies vary by geographical area, date of publication and the policy question being addressed.

**Methods**

We performed literature searches in MEDLINE, Embase, Econlit, The Health Economic Evaluations Database (HEED) and The National Health Service Economic Evaluation Database (NHS EED). From the 1189 unique studies retrieved, 65 studies were included for data extraction based on a priori eligibility criteria. Two authors independently reviewed these articles to determine eligibility for the final review. Data were extracted from the selected studies, focussing on six key structural or methodological themes covering different aspects of the model(s) used that may influence cost-effectiveness results.

**Results**

More recently published studies tend to model a larger number of HPV strains, and include a larger number of HPV-associated diseases. Studies published in Europe and North America also tend to include a larger number of diseases and are more likely to incorporate the impact of herd immunity and to use more realistic assumptions around vaccine efficacy and coverage. Studies based on previous models often do not include sufficiently robust justifications as to the applicability of the adapted model to the new context.

**Conclusions**

The considerable between-study heterogeneity in economic evaluations of HPV vaccination programmes makes comparisons between studies difficult, as observed differences in cost effectiveness may be driven by differences in methodology as well as by variations in funding and delivery models and estimates of model parameters. Studies should consistently report not only all simplifying assumptions made but also the estimated impact of these assumptions on the cost-effectiveness results.

*Practical Application*

## **Extended Cost-Effectiveness Analysis for Health Policy Assessment: A Tutorial**

Stéphane Verguet, Jane J. Kim, Dean T. Jamison

*Original Research Article*

## **The Clinical Impact and Cost Effectiveness of Quadrivalent Versus Trivalent Influenza Vaccination in Finland**

Lisa Nagy, Terho Heikkinen, Alfred Sackeyfio, Richard Pitman

## **PLOS Currents: Disasters**

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

[Accessed 20 August 2016]

### **[Coordinating the Provision of Health Services in Humanitarian Crises: a Systematic Review of Suggested Models](#)**

August 3, 2016 · *Research Article*

**Background:** Our objective was to identify published models of coordination between entities funding or delivering health services in humanitarian crises, whether the coordination took place during or after the crises.

**Methods:** We included reports describing models of coordination in sufficient detail to allow reproducibility. We also included reports describing implementation of identified models, as case studies. We searched Medline, PubMed, EMBASE, Cochrane Central Register of Controlled Trials, CINAHL, PsycINFO, and the WHO Global Health Library. We also searched websites of relevant organizations. We followed standard systematic review methodology.

**Results:** Our search captured 14,309 citations. The screening process identified 34 eligible papers describing five models of coordination of delivering health services: the "Cluster Approach" (with 16 case studies), the 4Ws "Who is Where, When, doing What" mapping tool (with four case studies), the "Sphere Project" (with two case studies), the "5×5" model (with one case study), and the "model of information coordination" (with one case study). The 4Ws and the 5×5 focus on coordination of services for mental health, the remaining models do not focus on a specific health topic. The Cluster approach appears to be the most widely used. One case study was a mixed implementation of the Cluster approach and the Sphere model. We identified no model of coordination for funding of health service.

**Conclusion:** This systematic review identified five proposed coordination models that have been implemented by entities funding or delivering health service in humanitarian crises. There is a need to compare the effect of these different models on outcomes such as availability of and access to health services.

## **PLoS Currents: Outbreaks**

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

(Accessed 20 August 2016)

### **[Invasion Dynamics of Teratogenic Infections in Light of Rubella Control: Implications for Zika Virus](#)**

August 16, 2016 · *Research Article*

**Introduction:** The greatest burden for a subset of pathogens is associated with infection during pregnancy. Evidence for teratogenic effects of Zika Virus have highlighted the importance of understanding the epidemiology of such pathogens. Rubella is perhaps the most classic example, and there is much to be learned from the long history of modelling associated with this virus.

**Methods:** We extended an existing framework for modeling age-specific dynamics of rubella to illustrate how the body of knowledge of rubella dynamics informs the dynamics of teratogenic infections more broadly, and particularly the impact of control on such infections in different transmission settings.

**Results:** During invasion, the burden in women of childbearing age is expected to peak, but then fall to low levels before eventually levelling out. Importantly, as illustrated by rubella dynamics, there is potential for a paradoxical effect, where inadequate control efforts can increase the burden.

Conclusions: Drawing on the existing body of work on rubella dynamics highlights key knowledge gaps for understanding the risks associated with Zika Virus. The magnitude and impacts of sterilizing immunity, plus antigenic maps measuring cross-protection with other flaviviruses, and the magnitude of transmission, as well as likely impact of control efforts on transmission are likely to be key variables for robust inference into the outcome of management efforts for Zika Virus.

### **Genetic Studies of *Vibrio cholerae* in South West Cameroon—A Phylogenetic Analysis of Isolates from the 2010-2011 Epidemic**

August 12, 2016 · *Research Article*

Introduction: During the cholera outbreak from 2010 to 2011 in Cameroon, 33,192 cases with 1,440 deaths (case fatality ratio 4.34%) were reported to the World Health Organization. Of these, the South West Region reported 3,120 clinical cases. This region is in the Equatorial Monsoon climatic subzone of Cameroon, close to the coast, raising questions as to whether cases were linked with development of environmental reservoirs.

Methods: In an investigation conducted by the Laboratory for Emerging Infectious Diseases, University of Buea, toxigenic *V. cholerae* O1 were isolated from diarrheal stool samples from 18 patients, with ages ranging from <3 to 70 years. Coordinates for clinical centers at which cases were identified were obtained using a handheld GPS, and were mapped using ArcGIS. Antibiotic susceptibility testing was performed using the Kirby-Bauer agar disc diffusion method. The full genomes of these strains were sequenced with the Illumina MiSeq platform. De novo assembly of cholera genomes and multiple sequence alignment were carried out using the bioinformatics pipeline developed in the Emerging Pathogens Institute laboratory at the University of Florida.

Results/Discussion: Genetic comparisons showed that isolates were closely related, with pairwise p-distances ranging from 2.25 to 14.52  $10^{-5}$  nt substitutions per site, and no statistically significant correlation between the pairwise genetic distances and the geographic distances among sampling locations. Indeed, the phylogeny of the Cameroonian strains displays the typical star-like topology and intermixing of strains from different locations that are characteristic of an exponential outbreak localized around a relatively restricted area with occasional spillover to other parts of the country, likely mediated by direct human contact and human movement. Findings highlight the utility of whole genome sequencing and phylogenetic analysis in understanding transmission patterns at the local level.

### **PLOS Medicine**

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

(Accessed 20 August 2016)

### **Make Data Sharing Routine to Prepare for Public Health Emergencies**

Jean-Paul Chretien, Caitlin M. Rivers, Michael A. Johansson

Essay | published 16 Aug 2016 PLOS Medicine

<http://dx.doi.org/10.1371/journal.pmed.1002109>

### **Building from the HIV Response toward Universal Health Coverage**

Jonathan Jay, Kent Buse, Marielle Hart, David Wilson, Robert Marten, Scott Kellerman, Morolake Odetoynbo, Jonathan D. Quick, Timothy Evans, Peter Piot, Mark Dybul, Agnes Binagwaho

Policy Forum | published 16 Aug 2016 PLOS Medicine

<http://dx.doi.org/10.1371/journal.pmed.1002083>

### **[Transitioning to Country Ownership of HIV Programs in Rwanda](#)**

Agnes Binagwaho, Ida Kankindi, Eugenie Kayirangwa, Jean Pierre Nyemazi, Sabin Nsanzimana, Fernando Morales, Rose Kadende-Kaiser, Kirstin Woody Scott, Veronicah Mugisha, Ruben Sahabo, Cyprien Baribwira, Leia Isanhart, Anita Asimwe, Wafaa M. El-Sadr, Pratima L. Raghunathan

Policy Forum | published 09 Aug 2016 PLOS Medicine

### **PLOS Neglected Tropical Diseases**

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

[Accessed 20 August 2016]

*Viewpoints*

### **[Next Steps for Ebola Vaccination: Deployment in Non-Epidemic, High-Risk Settings](#)**

Laura A. Skrip, Alison P. Galvani

| published 18 Aug 2016 PLOS Neglected Tropical Diseases

<http://dx.doi.org/10.1371/journal.pntd.0004802>

### **[The Case for Live Attenuated Vaccines against the Neglected Zoonotic Diseases Brucellosis and Bovine Tuberculosis](#)**

Aseem Pandey, Ana Cabello, Lavoisier Akoolo, Allison Rice-Ficht, Angela Arenas-Gamboa, David McMurray, Thomas A. Ficht, Paul de Figueiredo

Review | published 18 Aug 2016 PLOS Neglected Tropical Diseases

<http://dx.doi.org/10.1371/journal.pntd.0004572>

### **[Using a Human Challenge Model of Infection to Measure Vaccine Efficacy: A Randomised, Controlled Trial Comparing the Typhoid Vaccines M01ZH09 with Placebo and Ty21a](#)**

Thomas C. Darton, Claire Jones, Christoph J. Blohmke, Claire S. Waddington, Liqing Zhou, Anna Peters, Kathryn Haworth, Rebecca Sie, Christopher A. Green, Catherine A. Jeppesen, Maria Moore, Ben A. V. Thompson, Tessa John, Robert A. Kingsley, Ly-Mee Yu, Merryn Voysey, Zoe Hindle, Stephen Lockhart, Marcelo B. Sztein, Gordon Dougan, Brian Angus, Myron M. Levine, Andrew J. Pollard

Research Article | published 17 Aug 2016 PLOS Neglected Tropical Diseases

<http://dx.doi.org/10.1371/journal.pntd.0004926>

### **[Challenges to the Design of Clinical Trials for Live-Attenuated Tetravalent Dengue Vaccines](#)**

Philip K. Russell, Scott B. Halstead

Editorial | published 11 Aug 2016 PLOS Neglected Tropical Diseases

<http://dx.doi.org/10.1371/journal.pntd.0004854>

### **[Novel Ordered Stepped-Wedge Cluster Trial Designs for Detecting Ebola Vaccine Efficacy Using a Spatially Structured Mathematical Model](#)**

Ibrahim Diakite, Eric Q. Mooring, Gustavo E. Velásquez, Megan B. Murray

Research Article | published 10 Aug 2016 PLOS Neglected Tropical Diseases

<http://dx.doi.org/10.1371/journal.pntd.0004866>



## **PLoS One**

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

[Accessed 20 August 2016]

*Research Article*

### **[Effectiveness of Pneumococcal Conjugate Vaccines \(PCV7 and PCV13\) against Invasive Pneumococcal Disease among Children under Two Years of Age in Germany](#)**

Mark van der Linden, Gerhard Falkenhorst, Stephanie Perniciaro, Christina Fitzner, Matthias Imöhl

Research Article | published 15 Aug 2016 PLOS ONE

<http://dx.doi.org/10.1371/journal.pone.0161257>

### **[Indoor Air Pollution and Delayed Measles Vaccination Increase the Risk of Severe Pneumonia in Children: Results from a Case-Control Study in Mwanza, Tanzania](#)**

George PrayGod, Crispin Mukerebe, Ruth Magawa, Kidola Jeremiah, M. Estée Török

Research Article | published 10 Aug 2016 PLOS ONE

<http://dx.doi.org/10.1371/journal.pone.0160804>

## **PLoS Pathogens**

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

(Accessed 20 August 2016)

[No new relevant content identified]

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

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

(Accessed 20 August 2016)

[No new relevant content identified]

## **Prehospital & Disaster Medicine**

Volume 31 - Issue 04 - August 2016

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

[Reviewed earlier]

## **Prehospital & Disaster Medicine**

Volume 31 - Issue 04 - August 2016

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

[Reviewed earlier]

## **Preventive Medicine**

Volume 89, Pages 1-348 (August 2016)

<http://www.sciencedirect.com/science/journal/00917435/89>

*Editorial*

### **[Should we lower the age for routine HPV vaccination in the United States?](#)**



Pages 334-336

Joseph E. Tota, Sandra D. Isidean, Eduardo L. Franco

### **Should we lower the age for routine HPV vaccination in the United States?**

Pages 334-336

Joseph E. Tota, Sandra D. Isidean, Eduardo L. Franco

### **Increasing the intent to receive a pandemic influenza vaccination: Testing the impact of theory-based messages**

Original Research Article

Pages 104-111

Cristina A. Godinho, Lucy Yardley, Afrodita Marcu, Fiona Mowbray, Emma Beard, Susan Michie

#### *Abstract*

#### Objective

Vaccination is an effective preventive measure to reduce influenza transmission, especially important in a pandemic. Despite the messages encouraging vaccination during the last pandemic, uptake remained low (37.6% in clinical risk groups). This study investigated the effect of different types of messages regarding length, content type, and framing on vaccination intention.

#### Method

An online experiment was conducted in February 2015. A representative sample of 1424 people living in England read a mock newspaper article about a novel influenza pandemic before being randomised to one of four conditions: standard Department of Health (DoH) (long message) and three brief theory-based messages - an abridged version of the standard DoH and two messages additionally targeting pandemic influenza severity and vaccination benefits (framed as risk-reducing or health-enhancing, respectively). Intention to be vaccinated and potential mediators were measured.

#### Results

The shortened DoH message increased vaccination intention more than the longer one, by increasing perceived susceptibility, anticipated regret and perceived message personal relevance while lowering perceived costs, despite the longer one being rated as slightly more credible. Intention to be vaccinated was not improved by adding information on severity and benefits, and the health-enhancing message was not more effective than the risk-reducing.

#### Conclusion

A briefer message resulted in greater intention to be vaccinated, whereas emphasising the severity of pandemic influenza and the benefits of vaccination did not. Future campaigns should consider using brief theoretically-based messages, targeting knowledge about influenza and precautionary measures, perceived susceptibility to pandemic influenza, and the perceived efficacy and reduced costs of vaccination

### **Younger age at initiation of the human papillomavirus (HPV) vaccination series is associated with higher rates of on-time completion**

Original Research Article

Pages 327-333

Jennifer L. St. Sauver, Lila J. Finney Rutten, Jon O. Ebbert, Debra J. Jacobson, Michaela E.

McGree, Robert M. Jacobson

#### *Abstract*

Vaccination rates for human papillomavirus (HPV) have remained disappointingly low. It is critical to identify methods to increase on-time vaccine series completion rates (before 13 or 15 years). To determine whether younger age (9 to 10 years of age) at HPV vaccine series initiation was associated with improved on-time completion rates compared to initiation at 11 to 12 years, we examined the prevalence of on-time HPV vaccine series completion rates from August 2006 through December 2012 in a large, population-based cohort of children and adolescents (aged 9.5 to 27 years) residing in Olmsted County, MN on December 31, 2012 (n = 36,223). We compared age at vaccine initiation between individuals who successfully completed both 2 and 3 doses of the vaccination series on-time (before age 13.5 or 15.0 years) using multivariate logistic regression. On-time completion of both 2 and 3 doses of the vaccine series by age 13.5 or 15.0 years was significantly associated with initiation at 9 to 10 years as compared to 11 to 12 years after adjusting for sex, race, insurance status, frequent health care visits, and year of first vaccination (all p < .01). Interventions focused on beginning the vaccination series at 9 to 10 years of age may result in higher rates of timely series completion.

### **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 20 August 2016

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

[Reviewed earlier]

### **Public Health Reports**

Volume 131 Issue Number 4 July/August 2016

<http://www.publichealthreports.org/issuecontents.cfm?Volume=131&Issue=3>

[Reviewed earlier]

### **Qualitative Health Research**

September 2016; 26 (11)

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

***Special Issue: HIV & Sexual Health [13 articles]***

*HIV & Sexual Health*

**[The Framing and Fashioning of Therapeutic Citizenship Among People Living With HIV Taking Antiretroviral Therapy in Uganda](#)**

Steve Russell, Stella Namukwaya, Flavia Zalwango, and Janet Seeley

Qual Health Res September 2016 26: 1447-1458, first published on August 5, 2015

doi:10.1177/1049732315597654

### **Reproductive Health**

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

[Accessed 20 August 2016]  
[No new relevant content identified]

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

June 2016

<http://www.paho.org/journal/>

[Reviewed earlier]

## **Risk Analysis**

July 2016 Volume 36, Issue 7 Pages 1287–1509

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-7/issuetoc>

***Special Series: Issue focused on Measles and Rubella***

[Reviewed earlier]

## **Risk Management and Healthcare Policy**

Volume 9, 2016

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

[Accessed 20 August 2016]

[No new relevant content identified]

## **Science**

19 August 2016 Vol 353, Issue 6301

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

***Introduction to special issue:***

***[Neuroimmunology](#)***

By Kristen L. Mueller, Pamela J. Hines, John Travis

Science 19 Aug 2016 : 760-761

## ***In-Depth***

### ***[New polio cases in Nigeria spur massive response](#)***

By Leslie Roberts

Science 19 Aug 2016 : 738 Restricted Access

*Country's hopes for polio-free status are dashed.*

#### ***Summary***

Just as Nigeria and the global community were celebrating 2 years without a wild-type polio case in a country that once accounted for half of all cases in the world, the virus showed that any declaration of victory was premature. The report last week that two children in the northern state of Borno had been paralyzed by wild-type polio virus has triggered massive emergency vaccination efforts in Nigeria and neighboring countries. But the setback didn't come as much of a surprise to those in who have long been trying to eradicate the virus. Much of Borno is under control of the ruthless terrorist group Boko Haram, vaccinators have been unable to reach large numbers of children, and the insurgency has disrupted surveillance for the virus, which seems to have been circulating undetected for 5 years. The polio fighters in Nigeria face another

challenge as well, experts say. It is very hard to maintain the political commitment and energy required for an eradication campaign when the disease appears to have disappeared. With redoubled efforts and improved access to insecure areas, national and global officials are optimistic they can quash the new outbreak quickly and still meet the goal of stopping worldwide transmission of the virus in 2016.

## **Science Translational Medicine**

17 August 2016

Vol 8, Issue 352

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

*Editorial*

### **[Animal-based studies will be essential for precision medicine](#)**

y K. C. Kent Lloyd, Peter N. Robinson, Calum A. MacRae

Science Translational Medicine 17 Aug 2016 : 352ed12 Full Access

Precision medicine will be advanced by systematically integrating animal models of human disease, computational frameworks, and experimental preclinical strategies for validation of clinically actionable findings.

## **Social Science & Medicine**

Volume 160, Pages 1-130 (July 2016)

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

[New issue: No relevant content identified]

## **Tropical Medicine & International Health**

July 2016 Volume 21, Issue 7 Pages 819–935

<http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-6/issuetoc>

[Reviewed earlier]

## **Vaccine**

Volume 34, Issue 36, Pages 4271-4350 (5 August 2016)

<http://www.sciencedirect.com/science/journal/0264410X/34/36>

*Regular Papers*

### **[The immunogenicity and safety of a tetravalent measles-mumps-rubella-varicella vaccine when co-administered with conjugated meningococcal C vaccine to healthy children: A phase IIIb, randomized, multi-center study in Italy](#)**

Original Research Article

Pages 4278-4284

Paolo Durando, Susanna Esposito, Gianni Bona, Mario Cuccia, Maria Giuseppina Desole, Giuseppe Ferrera, Giovanni Gabutti, Angelo Pellegrino, Filippo Salvini, Ouzama Henry, Michael Povey, Federico Marchetti

*Abstract*

Introduction

Multiple vaccination visits and administrations can be stressful for infants, parents and healthcare providers. Multivalent combination vaccines can deliver the required number of

antigens in fewer injections and clinic visits, while vaccine co-administration can also reduce the number of visits. This non-inferiority study was undertaken to evaluate the feasibility of co-administering a combined measles-mumps-rubella-varicella (MMRV) vaccine with conjugated meningococcal C (MenC) vaccine in a large cohort of healthy Italian toddlers.

#### Methods

Healthy subjects aged 13–15 months were randomized (2:1:1) to receive single doses of either: co-administered MMRV + MenC at the same visit (MMRV + MenC group); or MMRV followed 42 days later by MenC (MMRV group); or MenC followed 42 days later by MMRV (MenC group). Blood samples were collected before and 43 days after vaccination. Antibody titers against MMRV were measured using ELISA. Functional-anti-meningococcal-serogroup activity (rSBAMenC) was assessed using a serum bactericidal test. Solicited local and general reactions were recorded for up to 4 and 42 days post-vaccination, respectively. Non-inferiority of MMRV + MenC to MMRV (post-dose-1 seroconversion rates) and MMRV + MenC to MenC (post-dose-1 seroprotection rates) was achieved if the lower limit (LL) of the 95% confidence interval (CI) for the group difference was  $\geq -10\%$  for each antigen.

#### Results

716 subjects were enrolled in the study. At 42 days post-vaccination, the MMRV seroconversion rates were 99.3% (measles), 94.5% (mumps), 100% (rubella) and 99.7% (varicella) in the MMRV + MenC group, and 99.4%, 93.2%, 100% and 100%, respectively, in the MMRV group. The seroprotection rates against rSBA-MenC were 98.3% in the MMRV + MenC group and 99.3% in the MenC group. Non-inferiority was reached for all the vaccine antigens. The safety profiles were as expected for these vaccines.

#### Conclusion

The immune responses elicited by co-administered MMRV + MenC were non-inferior to those elicited by MMRV or MenC alone and support vaccination of children with both vaccines at a single visit.

Clinical Trials registration: NCT01506193.

### **Immunogenicity and persistence of immunity of a quadrivalent Human Papillomavirus (HPV) vaccine in immunocompromised children**

Original Research Article

Pages 4343-4350

C. Raina MacIntyre, Peter Shaw, Fiona E. Mackie, Christina Boros, Helen Marshall, Michelle Barnes, Holly Seale, Sean E. Kennedy, Aye Moa, Andrew Hayden, Abrar Ahmad Chughtai, Edward V. O'Loughlin, Michael Stormon

#### *Abstract*

##### Aim

The aim of this study was to determine the immunogenicity and reactogenicity of HPV vaccine in immunocompromised children.

##### Methods

A multi-centre clinical trial was conducted in three paediatric hospitals in Australia. Unvaccinated children 5–18 years of age attending one of three paediatric hospitals with a range of specified conditions associated with immunosuppression were included. Quadrivalent HPV vaccine (Gardasil) was given to the participants and serum anti-HPV antibody levels were measured at baseline (before first dose), 7 and 24 months after the first dose of vaccine.

##### Results

Fifty-nine participants were enrolled across the three paediatric hospitals and among those one was seropositive to types 6, 11 and 16 at baseline. Seven months after the first dose,

seroconversion rates were 93.3%, 100%, 100% and 88.9% for type 6, 11, 16 and 18 respectively. The corresponding rates at 24 month follow up were 82.2%, 91.1%, 91.1% and 68.9%. The greatest increase in geometric mean titre (GMT) was for type 16, followed by type 11. GMTs declined over the following months, but remained more than fourfold higher for all serotypes compared to baseline titres at 24 months post vaccination. Injection site erythema, pain and swelling were commonly reported local adverse events and were less common after each dose. Few participants reported systemic adverse events, and minor disease flare occurred in two participants. One child developed a squamous cell oral carcinoma during follow up, but tissue was unable to be tested for HPV.

#### Conclusion

Immunosuppressed children had an adequate immunogenic response to Quadrivalent HPV vaccine regardless of age and the cause of immunosuppression. HPV related cancers occur at higher frequency and earlier in immunosuppressed patients, so early vaccination and optimal scheduling should be further studied in such children.

Clinical trial registration: NCT02263703 (ClinicalTrials.gov)

#### **Vaccine: Development and Therapy**

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

(Accessed 20 August 2016)

[No new content]

#### **Vaccines — Open Access Journal**

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

(Accessed 20 August 2016)

[No new relevant content]

#### **Value in Health**

June 2016 Volume 19, Issue 4, p297-510

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

[Reviewed earlier]

\* \* \* \*

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

#### **Current Opinion in Immunology**

Volume 41, August 2016, Pages v–vii

*Vaccines* \* Special section: Cancer immunology: Genomics & biomarkers

**[Editorial overview: Vaccines: novel technologies for vaccine development](#)**

R Rappuoli, E De Gregorio GlaxoSmithKline Vaccines, Siena, Italy

[No abstract]

## **International Journal of Community Medicine and Public Health**

2016; 3(8): 2004-2007. doi:10.18203/2394-6040.ijcmph20162186

### **A cross sectional study on awareness about injectable polio vaccine among pregnant women and mothers of children under 14 weeks in a rural area of Kannur, North Kerala, India**

Sarada A. K., Thilak S. A., Sushrit A. Nelloopant.

#### *Abstract*

Background: Poliomyelitis, a highly infectious disease which can cause irreversible total paralysis which mainly affects the children under five years of age. As the Government was introducing the injectable polio vaccine (IPV) from April 2016 in Kerala as a part of "polio end game strategy", the study was conducted to assess the awareness about IPV. The aim was to assess the level of knowledge about IPV and attitude towards IPV introduction in the national immunisation schedule among pregnant mothers and mothers having children <14 weeks, in rural Kannur, North Kerala, India

Methods: A cross sectional study was conducted in Anjarkandy grama panchayath under the rural field practice area of community medicine department, Kannur Medical College, Kannur, Kerala, India. Convenient sampling method was used for the sampling. Data was collected from pregnant mothers and mothers with children <14weeks by administering a pretested, semi-structured questionnaire by visiting houses and descriptive statistics were analysed.

Results: 56% (84) aware about main symptom of polio as paralysis. Only 14% (21) mothers were heard about IPV and its introduction in national immunisation schedule. The common sources of information about IPV were television (38.09%) and health workers (23.8%). About 91% (136) of the mothers were willing to vaccinate their children with IPV when government launches IPV in future.

Conclusions: Awareness about poliomyelitis was of intermediate level, awareness about IPV and its introduction into national immunisation schedule was poor but attitude towards IPV introduction into national immunisation schedule was positive. There is a need to increase the awareness by giving periodic health education to mothers by health workers and doctors

## **Nanomedicine: Nanotechnology, Biology and Medicine**

Available online 9 August 2016

### **A nanoparticle-based nicotine vaccine and the influence of particle size on its immunogenicity and efficacy**

Zongmin Zhao<sup>a</sup>, <sup>1</sup>, Yun Hu, PhD<sup>a</sup>, <sup>1</sup>, Reece Hoerle<sup>a</sup>, Meaghan Devinea, Michael Raleigh, PhD<sup>b</sup>, Paul Pentel, PhD<sup>b</sup>, Chenming Zhang, PhD<sup>a</sup>

#### *Abstract*

Traditional hapten-protein conjugate nicotine vaccines have shown less than desired immunological efficacy due to their poor recognition and internalization by immune cells. We developed a novel lipid-polymeric hybrid nanoparticle-based nicotine vaccine to enhance the immunogenicity of the conjugate vaccine, and studied the influence of particle size on its immunogenicity and pharmacokinetic efficacy. The results demonstrated that the nanovaccines, regardless of size, could induce a significantly stronger immune response against nicotine compared to the conjugate vaccine. Particularly, a significantly higher anti-nicotine antibody titer was achieved by the 100 compared to the 500 nm nanovaccine. In addition, both the 100 and 500 nm nanovaccines reduced the distribution of nicotine into the brain significantly. The 100 nm nanovaccine exhibited better pharmacokinetic efficacy than the 500 nm nanovaccine in



the presence of alum adjuvant. These results suggest that a lipid-polymeric nanoparticle-based nicotine vaccine is a promising candidate to treat nicotine dependence.

### **Journal of Nursing Measurement**

Volume 24, Number 2, 2016, pp. 226-244(19)

#### **The Student Human Papillomavirus Survey: Nurse-Led Instrument Development and Psychometric Testing to Increase Human Papillomavirus Vaccine Series Completion in Young Adults**

T Thomas, S Dalmida, M Higgins

##### *Abstract:*

Background and Purpose: The Student Human Papillomavirus Survey (SHPVS) was developed to examine students' perceived benefits or barriers to human papillomavirus (HPV) vaccination. Methods: Survey development included (a) 2-phase integrative literature reviews; (b) draft of survey items based on the literature; (c) critique of survey items by young adults, nursing and psychology faculty, and health care providers; and (d) pilot testing. The psychometric properties of the SHPVS were evaluated using classical item analysis and exploratory factor analysis (EFA) among a sample of 527 university students' ages 18–24 years. Results: The estimated Cronbach's alpha for the SHPVS is .74. Conclusions: The SHPVS is a measure of young adults HPV perceived vulnerability, perceived severity, perceived barriers, and perceived benefits of HPV vaccination.

### **The Journal of School Nursing**

July 28, 2016 1059840516659764

#### **HPV Vaccination Status and Mandate Support for School-Aged Adolescents Among College Females A Descriptive Study**

Kelly L. Wilson, PhD, MCHES<sup>1</sup>, Matthew Lee Smith, PhD, MPH, CHES<sup>2,3</sup>, Brittany L. Rosen, PhD, CHES<sup>4</sup>, Jairus C. Pulczynski, MPH<sup>3</sup>, Marcia G. Ory, PhD, MPH<sup>3</sup>

##### *Abstract*

The purpose of this study was to describe college-aged females' human papillomavirus (HPV) knowledge and beliefs, perceptions and perceived benefits of the HPV vaccine, and identify characteristics associated with vaccination status and support for HPV vaccine mandates. Data were collected from 1,105 females by an Internet-delivered questionnaire during February to March 2011. This descriptive study utilizes  $\chi^2$  tests and t-tests to compare participant responses. HPV-related knowledge scores were 8.08 out of 11 points. Those who initiated HPV vaccination were significantly younger, single, engaged in sex, were sexually active, and had a Pap test. Participants who had more friends receiving the vaccine were significantly more likely to support mandates for 9–11 and 12–17 years and were more likely to complete the HPV vaccination cycle. Findings suggest the importance of educational programs adopted and delivered by school nurses, which aim to improve student knowledge and reduce misconceptions related to the HPV vaccine and vaccination mandates.

\*

\*

\*

\*

### **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 20 August 2016*

[No new, unique, relevant content]

### **BBC**

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

*Accessed 20 August 2016*

[No new, unique, relevant content]

### **The Economist**

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

*Accessed 20 August 2016*

[No new, unique, relevant content]

### **Financial Times**

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

*Accessed 20 August 2016*

[No new, unique, relevant content]

### **Forbes**

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

*Accessed 20 August 2016*

#### **[Zika, Rio And The Rising Health Hazards Of Megacities](#)**

3 August 2016

Joel Kotkin, Contributor

... Dr. Seth Berkley, CEO of the vaccine alliance Gavi, points to the recent increase in the scale of densely populated urban areas, many without adequate sanitation, as turning containable illnesses like Zika and Ebola into pandemics. Dense urbanization may not have created Zika, which causes newborns to have unusually small heads, he notes, but it has accelerated its spread from a mere handful to a current tally of 1.5 million cases this year.

Outbreaks of new pandemics have become increasingly common in the developing world, where urban growth is now three times faster in low-income countries than in their higher-income counterparts. Developing country megacities already represent the majority of the world's 29 urban areas with over 10 million residents. The United Nations predicts 16 more megacities could emerge by 2030, all but one in the developing world...

## Foreign Affairs

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

Accessed 20 August 2016

[No new, unique, relevant content]

## Foreign Policy

<http://foreignpolicy.com/>

Accessed 20 August 2016

[No new, unique, relevant content]

## The Guardian

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

Accessed 20 August 2016

### **'No jab, no pay': thousands immunise children to avoid family payment cuts**

31 July 2016

*[Australia] Government's policy sees 5,700 immunise children and another 148,000 update vaccinations to avoid cuts of up to \$15,000 a year*

The federal government's 'no jab, no pay' policy has prompted thousands of parents who had previously refused to immunise their babies to get them vaccinated.

Social services minister Christian Porter says more than 5,700 have secured their child care payments by having their children immunised since the campaign started in January.

Under the policy, family payments of up to \$15,000 a year can be withheld from parents who don't immunise their children. Families receiving child care benefit and the child care rebate were given until March this year to get immunisations up to date or miss out on payments...

## New Yorker

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

Accessed 20 August 2016

*Annals of Medicine*

August 22, 2016 Issue

### **The Race for a Zika Vaccine**

*In the throes of an epidemic, researchers investigate how to inoculate against the disease.*

## New York Times

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

Accessed 20 August 2016

[No new, unique, relevant content]

## TIME

<http://time.com/>

Accessed 20 August 2016

### **Ellen Johnson Sirleaf: 2 Years After Ebola, Liberia Is a Changed Nation**

| 8 August 2016

Ellen Johnson Sirleaf is President of the Republic of Liberia

*'As our nation continues to rebuild, we have grown stronger in many ways'*

During the course of 17 devastating months, the Ebola epidemic infected nearly 11,000 people in Liberia alone, killing more than 4,800 of them, 192 of whom were doctors, nurses and

health practitioners. Today, two years after the World Health Organization declared an international emergency, and several months since “zero cases” signaled our nightmare was truly over, the question that now keeps many people awake at night is: could it happen all over again?

Without a doubt, the outbreak has had a profound effect on our nation beyond the individual lives affected and taken by this dreadful disease. In the wake of 30 years of civil and political turmoil, Ebola challenged much of the progress we had made in rebuilding the country, leaving Liberia in a weakened state. Our health systems and infrastructure had nearly collapsed, we now have a desperate shortage of health workers, and it will take years for our economy to recover. And yet, despite such challenges, I believe we are indeed now better prepared to cope if Ebola does once again rear its ugly head, thanks largely to the strength of our people...

### **Wall Street Journal**

<http://online.wsj.com/home-page? wsjregion=na,us& homepage=/home/us>

*Accessed 20 August 2016*

#### **The Latest: Reid: Congress must approve funds to fight Zika**

Aug. 19, 2016 12:53 pm ET

### **Washington Post**

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

*Accessed 20 August 2016*

#### **Do the new Merck HPV ads guilt-trip parents or tell hard truths? Both.**

By Laurie McGinley| 11 August 2016

Merck, which is running its first television commercials on human papillomavirus (HPV) in half a dozen years, has ignited a fierce debate over whether the pharmaceutical giant is trying to "shame" parents into getting their children vaccinated for the most common sexually transmitted infection.

The ads, which first aired June 28, are running on major network and cable channels, in day time and prime time, including during the Olympics, when a lot of people are watching TV with their families. They don't mention Merck's Gardasil, the most widely used vaccine for HPV. Instead, they take aim at a tender spot: parents' worries about doing right by their kids...

### **Think Tanks et al**

#### **Brookings**

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

*Accessed 20 August 2016*

[No new relevant content]

#### **Center for Global Development** [to 20 August 2016]

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

[No new relevant content]

### **Council on Foreign Relations**

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

*Accessed 20 August 2016*

*Expert Brief*

## **The Zika Threat Moves North**

1 August 2016

By Larry Brilliant and Laurie Garrett

...This virus is like no other. Zika seems to encompass the characteristics of dozens of viruses, all in one microscopic package. Spread primarily by mosquitoes, it is increasingly also transmitted sexually, and there are reasons to worry that Zika could take off like HIV did in the 1980s should the virus take hold in a highly sexually active niche in our society. Like Zika, HIV was an ancient African virus that primarily infected wild primates. It made the leap to human-to-human spread after the microbe got into the blood bank system, was shared on the contaminated needles of drug users, and spread quickly among gay populations in North America and Europe...

## **CSIS**

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

## **Catalyzing Health Gains through Global Polio Eradication - An India Trip Report**

A Report of the CSIS GLOBAL HEALTH POLICY CENTER

July 2016 : 22 pages

AUTHORS: Nellie Bristol, Chris Millard

DELEGATION MEMBERS: Jon Andrus, Nellie Bristol, Chris Millard, Suzi Plasencia, William Scheffer

\* \* \* \*  
\* \* \* \*

***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; PATH; the International Vaccine Institute (IVI); and industry resource members Crucell/Janssen/J&J, Pfizer, Sanofi Pasteur U.S., Takeda, Valera (list in formation), and the Developing Countries Vaccine Manufacturers Network (DCVMN).*

*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.*

\* \* \* \*