

**Center for Vaccine  
Ethics and Policy**

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**Vaccines and Global Health: The Week in Review**

**2 May 2015**

**Center for Vaccine Ethics & Policy (CVEP)**

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

*Vaccines and Global Health: The Week in Review is also **posted in pdf form** and as a set of blog posts at <http://centerforvaccineethicsandpolicy.wordpress.com/>. This blog allows full-text searching of over 6,500 entries.*

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

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**EBOLA/EVD** [to 2 May 2015]

*Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)*

**WHO: Ebola Situation Report - 29 April 2015**

*[Excerpts]*

**SUMMARY**

**:: A total of 33 confirmed cases of Ebola virus disease (EVD) was reported in the week to 26 April.** Two areas, Forecariah in Guinea and Kambia in Sierra Leone, accounted for 25 (76%) of all confirmed cases reported. Improved community engagement in these areas is required to ensure that all remaining chains of transmission can be tracked and ultimately brought to an end...

**COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION**

:: **There have been a total of 26,277 reported confirmed, probable, and suspected cases of EVD in Guinea, Liberia and Sierra Leone (figure 1, table 1), with 10,884 reported deaths** (outcomes for many cases are unknown). A total of 22 new confirmed cases were reported in Guinea, 0 in Liberia, and 11 in Sierra Leone in the 7 days to 26 April...

### **WHO strategic response plan 2015: West Africa Ebola outbreak**

WHO

ISBN 978 92 4 150869 8 :: 27 pages

pdf: Ebola response strategic plan 2015

#### *Overview*

The outbreak of the Ebola virus disease in West Africa is unprecedented in its scale, severity, and complexity. Guinea, Liberia and Sierra Leone are still affected by this outbreak, and are struggling to control the epidemic against a backdrop of extreme poverty, weak health systems and social customs that make breaking human-to-human transmission difficult. While encouraging progress has been made, there is still a considerable effort required to stop all chains of transmission in the affected countries, prevent the spread of the disease to neighbouring countries and to safely re-activate life-saving essential health services.

#### *Strategic objectives for WHO*

1. Stop transmission of the Ebola virus in affected countries
2. Prevent new outbreaks of the Ebola virus in new areas and countries
3. Safely reactivate essential health services and increase resilience
4. Fast-track Ebola research and development
5. Coordinate national and international Ebola response

#### *...OVERALL STRATEGY*

The next step in the response is crucial: to build on the progress and lessons to date, especially on the critical role of communities. A critical step will be to limit the spread of the virus to the coastal areas of the three high-transmission countries before the onset of the rainy season in April–May 2015. The priority is to identify and isolate all new cases by the end of May, and to confirm that they have come from known transmission chains and contact lists....

#### *...Conclusion*

In collaboration with our partners, WHO is determined to support the affected countries to reach zero cases of Ebola virus disease in West Africa and to facilitate the early recovery of the health sector. The successful strategies and lessons already learned in the fight against this devastating disease underpin the pragmatic approach and practical activities encompassed in this new strategic plan for 2015. Getting to zero cases through rigorous surveillance and extensive and thorough case finding, case investigation and management, and contact tracing can only be achieved with the vigilance and close collaboration of our partners and the governments of the most-affected nations. Most importantly, at the district and community levels we need to anticipate and pre-empt resistance, demanding new ways of working and behavioural adaptations of service providers.

The response efforts must continue in earnest because, without the elimination of Ebola, the planned reactivation of essential services disrupted by the epidemic and the future recovery of the countries' fragile economies and service infrastructures cannot successfully begin. WHO is

working with its partners to make sure a positive legacy remains after this crisis; a legacy that encompasses strengthened health systems and a resilience and preparedness.

**WHO convenes Meeting for the Assisted Review of the Janssen Ebola Zaire Vaccine Clinical Trials Application by Representatives of Ethics Committee and National Regulatory Authority of Sierra Leone in Accra Ghana**

Accra, 27 April 2015 - Despite signs of the Ebola Virus Disease (EVD) epidemic abating in West Africa, efforts continue to find an effective vaccine that can fight the virus both now and for future generations. As the race for an Ebola vaccine continues, experts gathered in Ghana from 8-10 April 2015 to review the clinical trial application for the Janssen Ebola Zaire Vaccine that will take place in Sierra Leone.

The meeting aimed to review the scientific and ethical aspects of the proposed vaccine trial in Sierra Leone to evaluate the immune response, identify any side effects and determine its effectiveness.

The meeting facilitated by WHO under the platform of the African Vaccine Regulatory Forum (AVAREF) was attended by 60 expert representatives of the Ethics Committee and the Pharmacy Board of Sierra Leone with support from Ghana's Food and Drug Authority (GFDA), Health Canada, the European Medicines Agency, the Medicines and Healthcare Products Regulatory Agency (MHRA) United Kingdom, and the United States Food and Drug Administration (US FDA). This meeting provided a forum for a thorough discussion on all scientific and ethical aspects of the proposed phase III clinical trial.

The meeting comes at a time when, despite the number of cases reducing, the goal of zero cases has not been reached. As at 15 April, the outbreak, which has persisted for more than a year, has infected 25,826 people and resulted in 10,704 deaths, according to WHO. There still remains a need to develop a vaccine capable of protecting the population in this epidemic and any future ones

The importance of collaborative partnerships in this regard is critical. WHO Coordinator of Regulatory System Strengthening, Director of Essential Medicines and Health Products (EMP) Department, Mr. Michael Ward explains the partnership with AVAREF, "WHO plays a key enabling role in supporting the AVAREF network, so that it may fulfil its potential in accelerating the availability of preventative vaccines and other important therapies for the people of Africa."

The meeting concluded with a signed agreement by Sierra Leone and Crucell Holland B.V., study sponsor and one of the Janssen Pharmaceutical Companies of Johnson & Johnson noting that further documentation and timelines are required before a final regulatory decision could be provided. AVAREF Chair Dr Beno Yakubu said, "Under the platform of AVAREF, this meeting is an indication of the due diligence taken by the pharmaceutical companies and partners to jointly ensure that the clinical trial process is of the highest ethical and scientific standards to ensure the safety of the volunteers and patients who will ultimately receive the vaccine."

The meeting was co-chaired by Health Canada (Dr Lindsay Elmgren, Director, Centre for Biologics Evaluation), Ghana National Regulation Authority (NRA) CEO (Mr Hudu Mogtari) and the AVAREF Chair Dr Beno Yakubu).

*About the vaccine regimen:*

The Ebola vaccine regimen in development at the Janssen Pharmaceutical Companies of Johnson & Johnson, which was discovered in a collaborative research program with the National Institutes of Health, uses a prime-boost combination of two components that are based on AdVac® technology from Crucell Holland B.V., one of the Janssen Pharmaceutical Companies, and the MVA-BN® technology from Bavarian Nordic. The company is collaborating with numerous partners, including London School of Hygiene and Tropical Medicine and Inserm, to accelerate the development of the vaccine regimen. Evaluation of the vaccine regimen commenced with Phase I clinical trial at the Oxford Vaccine Group in December 2014 and this has been followed by Phase 1 studies in the United States (US) and Africa (Kenya, Uganda, Tanzania).

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**POLIO** [to 2 May 2015]

*Public Health Emergency of International Concern (PHEIC)*

**GPEI Update: Polio this week - As of 29 April 2015**

Global Polio Eradication Initiative

*[Editor's Excerpt and text bolding]*

Full report: <http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx>

:: Our thoughts are with the people of Nepal, where the polio infrastructure is closely involved in relief operations. Polio staff are often among the first to respond in emergencies by utilizing their local knowledge and strong systems to plan, monitor and implement the response.

:: Following a year since the last detection of wild poliovirus in the environment, Israel has been moved from the International Health Regulations (IHR) list of countries infected with poliovirus to the list of countries no longer infected but vulnerable to the international spread of polio. The Emergency Committee of the IHR met on 24 April for the fifth time to discuss the temporary recommendations and a report will be released shortly. [More](#).

*Selected excerpts from Country-specific Reports*

***Pakistan***

:: One new WPV1 case was reported in this week in Peshawar district of Khyber Pakhtunkhwa Province. This most recent case had onset of paralysis on 29 March. The total number of WPV1 cases for 2015 is now 22 (and remains 306 for 2014)

:: Efforts are ongoing to strengthen the implementation of the 'low season' emergency operations plan. Strong, functional Emergency Operations Centres (EOCs) are now operational both at the federal and provincial levels. Strategies are focusing on clearly identifying reasons for missed children, and putting in place area-specific mechanisms to overcome area-specific challenges. Independent monitoring is being strengthened and rolled out across wider geographic areas to provide a clearer assessment of quality and associated gaps.

:: Activities are focusing on known infected areas, but also areas deemed at high-risk but which have not reported polio cases. Environmental surveillance indicates widespread transmission of polioviruses, not just in known infected areas but also in areas without cases. Environmental surveillance is proving to be an instrumental supplemental surveillance tool enabling a clearer epidemiological picture.

**GAVI** [to 2 May 2015]

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

28 April 2015

**More than two million Congolese children per year to be protected against polio**

*Democratic Republic of Congo to introduce Inactivated Polio Vaccine with Gavi and partners' support.*

Kinshasa, 28 April 2015 – More than two million children in the Democratic Republic of Congo will benefit from Inactivated Polio Vaccine (IPV) every year as the country celebrates African Vaccination Week by introducing the vaccine into its routine immunisation schedule...

...The first doses of the vaccine will be delivered this month in four provinces (Bandundu, Bas Congo, Equateur and Kinshasa), a further four provinces (Kasaï Occidental, Kasaï Oriental, Katanga and Maniema) will introduce the vaccine in May and children in the final three provinces (North and South Kivu, Province Orientale) will receive the vaccine in June.

"As long as a child somewhere is not protected against this crippling disease, every child is at risk," said Anuradha Gupta, deputy CEO of Gavi, the Vaccine Alliance. "Gavi fully supports the government in its efforts to strengthen its immunisation system as high routine coverage establishes a strong base for population immunity to prevent polio outbreaks and builds a sustainable platform for the introduction of IPV and other lifesaving vaccines. Immunisation is not just about protecting children against a disease, it is about unlocking the productivity potential of individuals, communities and countries."

Strong routine immunisation systems are critical to reach polio elimination targets and prevent thousands of cases of disease and death. The Democratic Republic of Congo, with support from its partners, has improved its routine immunisation coverage and seen the percentage of children receiving DTP3 (three doses of diphtheria, tetanus, pertussis) rise from 25% in 1999 to 72% in 2013. However, geographical challenges as well as conflicts and insecurity have resulted in large differences between provinces.

DRC has been polio-free since the end of 2011 but for many years it was among the most affected countries worldwide. The year before DRC was declared polio-free, 93 cases were recorded. The challenge now for the Congolese health system and other partners is to make sure that polio does not return, and increase routine immunisation coverage against other diseases...

**:: Statement – Gavi's relationship with India**

*Clarification from Gavi, the Vaccine Alliance*

Geneva, 30 April 2015 - Following a recent newspaper report regarding the relationship between Gavi, the Vaccine Alliance and India, Gavi would like to clarify the following points:

An article published recently in an Indian newspaper stated that Gavi was withdrawing funding from India, thereby jeopardising the Government of India's ongoing efforts to improve immunisation coverage. That is not the case.

Gavi remains a committed partner of India and we will continue to support the country in its endeavours to immunise more of its children against life-threatening diseases.

Thanks to its growing economy, India is projected to reach the threshold of US\$ 1,580 Gross National Income per capita which means it has entered what is known as the 'graduation' phase in relation to Gavi support.

Over the next five years, Gavi and India will work together towards financing the introductions of some new vaccines and assuring that these will ultimately have budget provisions within the Government of India budget so that children in India continue to have access to vaccines for generations to come.

Gavi applauds the excellent work by the Government of India to improve immunisation coverage under Mission Indradhanush and its work to protect the lives of children living in 201 of the most at risk districts in the country.

#### Gavi's work with India

Gavi currently supports pentavalent vaccine which offers protection against five diseases (diphtheria-tetanus-pertussis (DTP), hepatitis B, and Haemophilus influenzae type b) as well as providing funding to help India to strengthen its health systems.

Between 2000 and 2015, Gavi has disbursed more than US\$ 240 million to help India to immunise its children against life-threatening diseases. Additionally, Gavi has committed \$107 million to support health systems strengthening in India, which is likely to play a role in the success of Mission Indradhanush, over the next five years.

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### **WHO & Regionals [to 2 May 2015]**

#### **Nepal**

[:: Nepal's Ministry of Health puts a hold on foreign medical teams](#)

The Nepalese Ministry of Health has asked that any foreign medical teams ready to deploy to Nepal should please refrain from doing so. While the Ministry has expressed gratitude for all offers of assistance, they have advised that the need for foreign medical teams has already been met. Teams en route without a designated duty station will due to this be asked to turn away. All foreign medical teams on stand-by to assist Nepal's earthquake response should register with WHO and keep updated on the situation through WHO's homepage and the virtual On-site Operations Coordination Centre (OSSOC) website.

[More information on Foreign Medical Teams](#)

[Visit the Virtual OSSOC website](#)

[Registration form for Foreign Medical Teams \(FMTs\)](#)

[:: WHO mobilizes funds for long-term spinal cord treatment after Nepal earthquake](#)

2 May 2015 -- Among the estimated 14,000 injuries incurred as a result of the April 25 earthquake, which measured 7.8 on the Richter scale and has so far resulted in 6200 recorded fatalities, approximately 1 in 3 (or around 4700) will require follow-up rehabilitation treatment. Of this number, approximately 12% have damage to their spinal cord.

[Read the news release](#)

[:: WHO coordinating the health response to Nepal earthquake](#)

29 April 2015

[:: WHO sending in more medical supplies and assisting the arrival of foreign medical team support for earthquake-ravaged Nepal](#)

26 April 2015

[:: Sierra Leone wraps up four-day health and vaccination campaign](#) 1 May 2015

...WHO worked in close collaboration with the Sierra Leone government and partners, to plan and supervise the recent Maternal and Child Health Week national campaign. The campaign aimed to reach more than 1.5 million children under the age of 5, with life-saving immunizations. In addition, children's nutritional levels were measured, deworming tablets were administered and HIV testing was available for pregnant women and their partners...

:: **[Americas region is declared the world's first to eliminate rubella](#)**

April 2015-- The Americas region has become the first in the world to be declared free of endemic transmission of rubella, a contagious viral disease that can cause multiple birth defects as well as fetal death when contracted by women during pregnancy.

:: **[WHO report finds systems to combat antibiotic resistance lacking](#)**

29 April 2015 -- WHO urges countries to reduce the spread of antimicrobial resistance by implementing a national plan that prevents the misuse of antibiotics. A new WHO report highlights the need for governments to take active measures to preserve the efficacy of antimicrobial medicines, such as antibiotics. WHO, countries and partners have developed a draft Global Action Plan to combat antimicrobial resistance to be reviewed by the sixty-eighth World Health Assembly in May 2015.

:: The [Weekly Epidemiological Record \(WER\) 1 May 2015](#), vol. 90, 18 (pp. 185–200) includes -

:: Hepatitis E vaccine: WHO position paper, May 2015

:: **[Global Alert and Response \(GAR\) – Disease Outbreak News \(DONs\)](#)**

Middle East Respiratory Syndrome coronavirus (MERS-CoV) – Saudi Arabia 29 April 2015

Meningococcal disease - Niger 29 April 2015

:: [GIN April 2015](#) 1 May 2015

:: [Sixty-eighth World Health Assembly](#) - 18–26 May 2015

:: **[WHO Regional Offices](#)**

**[WHO African Region AFRO](#)**

:: [A new entity to accelerate the elimination of neglected tropical diseases in Africa](#)

Johannesburg, 30 April 2015 - The World Health Organization is stepping up efforts to accelerate the elimination of neglected tropical diseases (NTD) in the African Region. Health experts, donors, development partners and affected countries have reached a consensus on the main components of the framework for establishing a new NTD entity. This entity will support and guide affected countries in the African region to accelerate the implementation of actions required to eliminate NTDs by 2020.

The WHO Regional Director for Africa, Dr Matshidiso Moeti in her opening remarks underscored the need for a strong entity that will provide high quality technical support, and strengthen capacity of Member States to eliminate NTDs. Dr Moeti said, "The new NTD entity needs to be cost efficient, cross-cutting with other NTD interventions and with a stronger link with stakeholders and actors in order to achieve the set targets in 2020."

The WHO African Region faces a huge burden of neglected tropical diseases which affects millions of people who are impoverished. The region carries half of the global burden of NTDs.

The move to establish a new entity arises from the current global and regional commitment from donors, pharmaceutical companies, countries and other partners to accelerate the elimination of NTDs.

The new NTD entity will also facilitate the smooth transition of technical support to affected countries as the African Programme for Onchocerciasis Control (APOC) closes on 31 December, 2015. APOC was established in 1995 to tackle river blindness. Over the past 20 years, the work of APOC has made commendable progress in tackling river blindness (Onchocerciasis) in most affected communities. The new entity focuses on the five diseases (elephantiasis, river blindness, trachoma, bilharzia and intestinal worms) that can be treated with mass drug administration. Its operations will build on the experience gained in recent years in tackling NTDs.

In her concluding comments, Dr Moeti thanked APOC for its contribution to tackling river blindness and expressed profound gratitude to Member States, donors, communities, non-governmental development organizations and the many WHO staff that contributed significantly to this achievement. The Regional Director promised to "follow up the NTD agenda and ensure that the new entity achieves the expected results by 2020."

[:: 1 in 5 children in Africa do not have access to life-saving vaccines - 28 April 2015](#)

[:: Humanitarian crisis in the Central African Republic: lack of funding threatens the free-access to healthcare -](#)

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

[:: Americas region is declared the world's first to eliminate rubella](#) (04/29/2015)

[:: La Fundación Chespirito se unió a la OPS/OMS para celebrar la Semana de Vacunación en las Américas](#) (04/28/2015)

[:: 13th annual Vaccination Week in the Americas kicks off in Ecuador](#) (04/26/2015)

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

[:: WHO works with partners to prevent diarrhoeal diseases](#) SEAR/PR/1597 30 April 2015

[:: WHO, health partners striving to treat quake survivors in Nepal's remote regions](#) SEAR/PR/1596 29 April 2015

[:: WHO coordinating the health response to Nepal earthquake; working to prevent spread of disease](#) 29 April 2015

[:: WHO sending in more medical supplies and assisting the arrival of foreign medical team support for earthquake-ravaged Nepal](#) 27 April 2015

### **WHO European Region EURO**

[:: At least one in three Europeans can be exposed to asbestos at work and in the environment](#) 30-04-2015

[:: Air pollution costs European economies US\\$ 1.6 trillion a year in diseases and deaths, new WHO study says](#) 28-04-2015

[:: From the migration front line: interview with Lampedusa doctor](#) 27-04-2015

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

[:: WHO report finds systems to combat antibiotic resistance lacking](#) 29 April 2015

[:: The future of nursing and midwifery in the Region](#) 29 April 2015

[:: Closing the immunization gap in Afghanistan](#) 26 April 2015

### **WHO Western Pacific Region**

:: [Protect your community: Get vaccinated](#)

2015 – An estimated 1.5 million children worldwide die each year of diseases that can be readily prevented by vaccines. On World Immunization Week (24 April – 3 May), the World Health Organization (WHO) in the Western Pacific Region underscores the importance of immunization as a shared responsibility and a vital component in protecting communities.

[Read the news release](#)

[Read the Regional Director's message](#)

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**IVI Watch** [to 2 May 2015]

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

:: [IVI joins forces with Kia Motors, Korea, Malawi, and WHO to conduct emergency vaccination in flood-hit areas in Malawi](#)

- *Southern region in Malawi hit by cholera outbreak due to recent massive flooding.*
- *International efforts ongoing to stem the potentially explosive deadly outbreak among other post-flood relief measures.*
- *IVI teams up with Kia Motors, South Korea's Ministry of Foreign Affairs, Malawi's Ministry of Health, and the World Health Organization to vaccinate 160,000 people against cholera in Nsanje District.*

*[Undated]*

Seoul, Korea – The International Vaccine Institute (IVI), in collaboration with Kia Motors, the Ministry of Foreign Affairs of the Republic of Korea (MOFA), Malawi's Ministry of Health, and the World Health Organization (WHO) conducted an emergency cholera vaccination campaign in Nsanje District in southern Malawi in response to concerns over a rapidly spreading cholera outbreak. The campaign, which targeted vaccinating 160,000 people, was launched on March 31, 2015.

The floods that hit Nsanje District in January this year have killed 176 people and displaced more than 200,000 people. Malawian President Peter Mutharika declared it a national crisis and urged the international community to provide assistance. Amid the situation, an increasing number of cholera cases have been reported in camps for internally displaced persons and surrounding areas. A total of 329 cases have been confirmed since the outbreak began in February, with half of all cases reported in two weeks through April 10.

In the wake of mounting concerns over a potentially explosive outbreak that could kill and sicken thousands as seen in Haiti in 2010 and South Sudan in 2013, IVI, Malawi's Ministry of Health, and WHO have worked together to rapidly deploy the oral cholera vaccine as an emergency measure to control the outbreak and prevent its further spread.

Since 2013, Kia Motors has been supporting IVI on a survey of areas considered to be at high risk for cholera in Malawi and on preparations for a pilot cholera vaccination demonstration project. However, when the floods struck and a cholera outbreak emerged in southern Malawi in early 2015, Kia Motors responded to the crisis by supporting the procurement of vaccines needed for the emergency vaccination. In addition, the Korean Ministry of Foreign Affairs has quickly responded to the humanitarian crisis by providing emergency funding to IVI for the vaccination.

"We are thrilled to have the opportunity to provide help in a small way to flood-affected people in a disaster situation through the cholera vaccination project in Malawi," Chang Muk Choi, the head of CSR Management Team at Kia Motors Corporation said, "Going forward, Kia will redouble efforts to become a company that helps meet the need of our society."

The emergency vaccination campaign uses an oral cholera vaccine that was developed by IVI through an international product development partnership with collaborators from Korea, India, Sweden, Vietnam and the United States. The vaccine, Shanchol, (manufactured by Shantha Biotechnics, part of the Sanofi Group) was approved by WHO for global use in 2011. The vaccine is given in two doses and protects against cholera for up to five years...

**UNICEF** [to 2 May 2015]

[http://www.unicef.org/media/media\\_78364.html](http://www.unicef.org/media/media_78364.html)

:: [One week after Nepal earthquake UNICEF warns of disease risk for children](#)

KATHMANDU, 2 May 2015 – One week on from the earthquake in Nepal, UNICEF says the health and wellbeing of children affected by the disaster are hanging in the balance – as many have been left homeless, in deep shock and with no access to basic care. With the monsoon season only a few weeks away, children will be at heightened risk of diseases like cholera and diarrhoeal infections, as well as being more vulnerable to the threat of landslides and floods.

:: [Life-saving UNICEF supplies reach Nepal to help 1.7 million children severely affected by earthquake](#)

KATHMANDU, Nepal / NEW YORK, 30 April 2015 – Over the past 48 hours, UNICEF has delivered 29 metric tonnes of humanitarian supplies to Nepal including tents and tarpaulins, water purification tablets, first aid and hygiene kits, as part of ongoing efforts to reach at least 1.7 million children living in areas hardest hit by the earthquake. Over the coming days, UNICEF is planning additional aid items to arrive in Kathmandu.

:: [UNICEF delivers lifesaving supplies to Aden as Yemen runs out of medicine, equipment](#)

SANA'A, Yemen/AMMAN, Jordan, 28 April 2015 – A UNICEF shipment of urgent medical supplies reached Yemen today and will benefit more than 500,000 people, mostly women and children, for the next three months.

**Sabin Vaccine Institute Watch** [to 2 May 2015]

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

[9th International Conference on Typhoid, Invasive NTS Disease Held in Bali, Indonesia](#)

BALI, INDONESIA — May 1, 2015 —The Coalition against Typhoid (CaT), in collaboration with Bio Farma, began the 9th International Conference on Typhoid and Invasive NTS Disease in Bali, Indonesia, with more than 200 public health experts from around the world in attendance. Over the next three days, they will discuss strategies to combat typhoid and invasive non-typhoidal salmonella (iNTS) disease. Experts will present their research on disease burdens, the cost effectiveness of intervention strategies and global policy recommendations for invasive salmonelloses.

**Global Fund** [to 2 May 2015]

<http://www.theglobalfund.org/en/mediacenter/newsreleases/>  
:: [Global Fund Launches Human Rights Complaints Procedure](#)  
27 April 2015  
*News Releases*

**European Medicines Agency Watch** [to 2 May 2015]  
<http://www.ema.europa.eu/ema/>  
:: [Progress in science, medicines, health](#)  
30/04/2015  
EMA publishes 2014 annual report

**European Vaccine Initiative** [to 2 May 2015]  
<http://www.euvaccine.eu/news-events>  
:: [World Malaria Day 2015: We can further bring down deaths from malaria by concerted global action](#)  
25 April 2015  
'European Vaccine Initiative urges to sustain funding and political commitment to ensure continued success in combatting malaria'.

**DCVMN / PhRMA / EFPIA / IFPMA / BIO Watch** [to 2 May 2015]  
:: [IFPMA - Pour une approche intégrée contre les faux médicaments](#)  
30 April 2015  
  
:: [IFPMA - New research-based pharmaceutical industry report provides insights on how to slow down antimicrobial resistance \(AMR\) and boost antibiotic R&D](#)  
29 April 2015  
  
:: [IFPMA - Africa needs more efficient regulatory systems to improve access to medicines; L'Afrique a besoin de systèmes réglementaires plus efficaces afin d'améliorer l'accès aux médicaments](#)  
27 April 2015

:: [DCVMN - Gavi CEO as special guest with DCVMN Executive Committee](#)  
28-April-2015  
Geneva, 13 April 2015 – as the World Immunization Week 2015 approaches the Executive Committee of DCVMN had the pleasure and honour to host a special guest, Dr. Seth Berkley, Chief Executive Officer of Gavi, the Vaccine Alliance.  
The informal dialogue was around the sustainability of vaccine supply to close the immunization gap between wealthy and the world's poorest populations. Many of the 44 DCVMN corporate members, based in 16 developing countries and territories, have supported Gavi for over a decade by supplying high-quality prequalified vaccines, when and where needed. Berkley conveyed the news that the commitments made by donors at the recent Gavi Pledging Conference will enable to immunize an additional 300 million children in poor countries between 2016 and 2020, and recognized the importance of the DCVMN constituency in

supporting the global health achievements, in making the world a healthier place, through most affordable vaccines available to Gavi.

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**CDC/MMWR/ACIP Watch** [to 2 May 2015]

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

:: MMWR Weekly - May 1, 2015 / Vol. 64 / No. 16

*No new digest content identified.*

**BMGF (Gates Foundation)** [to 2 May 2015]

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

*No new digest content identified.*

**PATH** [to 2 May 2015]

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

*No new digest content identified.*

**NIH Watch** [to 2 May 2015]

<http://www.nih.gov/news/health/apr2015/niad-01.htm>

*No new digest content identified.*

**FDA Watch** [to 2 May 2015]

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

*No new digest content identified.*

**Industry Watch** [to 2 May 2015]

*No new digest content identified.*

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

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

**Global evidence on inequities in rural health protection**

*New data on rural deficits in health coverage for 174 countries*

ILO - ESS (Extension of Social Security) Paper Series No. 47

Edited by Xenia Scheil-Adlung, ILO

2015 :: 83 pages

*Summary* (English)

This paper presents global estimates on rural/urban disparities in access to health-care services. The report uses proxy indicators to assess key dimensions of coverage and access involving the core principles of universality and equity. Based on the results of the estimates, policy options are discussed to close the gaps in a multi-sectoral approach addressing issues and their root causes both within and beyond the health sector.

#### *Foreword*

While inequities in health protection are increasingly recognized as an important issue in current policy debates on universal health coverage (UHC) and in the post-2015 agenda, the rural/urban divide is largely ignored. A key reason for disregarding equity in coverage and access to health care of large parts of the population relates to the nearly complete absence of disaggregated data providing sufficient information at national, regional and global level. Only vague and fragmented information, often limited to microdata, can be found.

Given this gap in information, it is hardly possible to quantify and assess the extent of disparities and deficits experienced by rural populations as regards key aspects of their rights to health and social protection; the availability, affordability and financial protection of needed health services; and increases or decreases in inequities. Further, governments and policy-makers lack evidence to set priorities, and thus face challenges in addressing the issues that are spread over various policy domains including health, social protection, labour market and more generally economic and fiscal policies.

This paper presents and analyses for the first time related global, regional and national data. It is developed and made available by the ILO. The data allow investigating both the extent of and major causes of rural/urban inequities in coverage and access to health care. Further, it discusses impacts and policy options to achieve more equitable results.

The data development and related assessments provided in this paper are anchored in the framework of universal health protection along the lines of international legal standards, particularly the ILO Social Protection Floors Recommendation, 2012 (No. 202) and the UN Resolution on Universal Health Coverage (12 December 2012).

The paper has been developed as part of the mandate of the ILO Areas of Critical Importance (ACI) on Decent Work in the Rural Economy as well as the ACI on Creating and Extending Social Protection Floors, and has been reviewed by a significant number of experts in relevant development agencies. It highlights the needs of disadvantaged, marginalized and vulnerable rural populations and contributes to related global research products and statistics. Further, it provides guidance to ILO member States on establishing and extending social protection floors for all as a fundamental element of national social security systems.

The evidence provided in the paper suggests that inequalities in coverage and access to health care exist globally, in every region and nearly every country. In fact, the place of residence can be considered as the entry door or key barrier to accessing needed health care. Against this background, the paper aims at contributing to the development of urgently needed policy responses realizing the universal human rights to social protection and health, particularly for rural populations.

#### *Report Press Release*

#### **[More than half of the global rural population excluded from health care](#)**

*ILO report shows huge differences in health care access between rural and urban areas worldwide.*

27 April 2015

GENEVA (ILO News) – A new ILO report shows that 56 per cent of people living in rural areas worldwide do not have access to essential health-care services – more than double the figure in urban areas, where 22 per cent are not covered...

...The highest number of people in rural areas who are not covered by essential health-care services is in Africa where it amounts to 83 per cent. The most affected countries also face the highest levels of poverty.

The largest differences between rural and urban areas, however, exist in Asia. For example, in Indonesia the percentage of people that are not covered is twice as high in rural areas as in urban areas.

"Decades of underinvestment in health interrupted efforts to develop national health systems and ultimately resulted in the neglect of health in rural areas. This has a huge human cost. Health is a human right and should be provided to all residents within a country," said Isabel Ortiz, Director of the ILO's Social Protection Department .

#### Lack of health workers in rural areas

The ILO study further finds that even if access to health care is guaranteed by law, people in rural areas remain excluded from health care because such laws are not enforced where they live.

The situation is worsened by the lack of health workers in the world's rural areas. Although half of the world's population lives in them, only 23 per cent of the global health workforce is deployed to rural areas. The ILO estimates that 7 million out of the total 10.3 million health workers who are lacking globally are needed in these areas.

Africa and Latin America are the two regions where this problem is most acute. In Nigeria, for example, more than 82 per cent of the rural population is excluded from health-care services due to insufficient numbers of health workers compared to 37 per cent in urban areas.

Underfunding is closely linked to the unavailability of services. The ILO study shows that financial resource gaps are nearly twice as high in rural than in urban areas. The largest gaps are found in Africa. However, significant inequities also exist in Asia and Latin America.

The extent of impoverishing out-of-pocket payments (OOPs) is also high in rural areas. The study shows that rural populations in Africa and Asia are burdened with OOPs that amount to 42 and 46 per cent of total health expenditure respectively. In many Asian countries such as Afghanistan, Bangladesh, Cambodia and Sri Lanka, OOPs are two to three times higher in rural than in urban areas.

"The lack of legal coverage, insufficient numbers of health workers, inadequate funding, and high OOPs have created life-threatening inequities in many countries," said Xenia Scheil-Adlung, Health Policy Coordinator at the ILO.

"Strengthening both the demand and supply side of services is crucial when moving towards universal health protection, particularly in rural areas. Legal health coverage is necessary, but

not sufficient. Only when quality services are actually made available and affordable for all those in need can effective access to health care be ensured," she added.

#### Closing the gaps

The study explains that closing rural health access gaps requires a comprehensive and systematic approach that simultaneously addresses missing rights, health workers, funding, financial protection and quality. Such an approach needs to be based on the principles of universality and equity and calls for solidarity in financing and burden sharing.

"Addressing such inequities needs to consider the specific characteristics of rural populations, including high poverty rates and informality of work. This means moving from charity to rights, the provision of health workers with decent working conditions that enhance productivity, and the minimization of out-of-pocket payments by patients to avoid poverty. It also requires complementary socio-economic and labour market policies to trigger inclusive economic growth," said Scheil-Adlung.

The study highlights the key role that national social protection floors can play in reducing and eliminating rural/urban gaps through human rights-based approaches. In this sense, it points to the importance of ILO Recommendation 202 on social protection floors .

"This study shows that investing in rural health, as part of a national health system, is affordable and yields significant economic and social returns. Progress towards universal health protection is possible in any country, irrespective of its level of income," Ortiz concludes.

#### **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)*

#### **The American Journal of Bioethics**

Volume 15, Issue 4, 2015

<http://www.tandfonline.com/toc/uajb20/current>

[Reviewed earlier]

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

May 2015 Volume 43, Issue 5, p423-546, e1-e17

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

## **Cleaning and disinfecting environmental surfaces in health care: Toward an integrated framework for infection and occupational illness prevention**

Margaret M. Quinn, Paul K. Henneberger, National Institute for Occupational Safety and Health (NIOSH), National Occupational Research Agenda (NORA) Cleaning and Disinfecting in Healthcare Working Group

p424–434

Published online: March 17, 2015

Open Access

*Preview*

The Cleaning and Disinfecting in Healthcare Working Group of the National Institute for Occupational Safety and Health, National Occupational Research Agenda, is a collaboration of infection prevention and occupational health researchers and practitioners with the objective of providing a more integrated approach to effective environmental surface cleaning and disinfection (C&D) while protecting the respiratory health of health care personnel.

## **Planning and response to Ebola virus disease: An integrated approach**

Philip W. Smith, Kathleen C. Boulter, Angela L. Hewlett, Christopher J. Kratochvil, Elizabeth J. Beam, Shawn G. Gibbs, John-Martin J. Lowe, Michelle M. Schwedhelm

p441–446

*Preview*

The care of patients with Ebola virus disease (EVD) requires the application of critical care medicine principles under conditions of stringent infection control precautions. The care of patients with EVD requires a number of elements in terms of physical layout, personal protective apparel, and other equipment. Provision of care is demanding in terms of depth of staff and training. The key to safely providing such care is a system that brings many valuable skills to the table, and allows communication between these individuals.

## **Influenza vaccination uptake and its socioeconomic determinants in the older adult Iranian population: A national study**

Parisa Taheri Tanjani, Mehran Babanejad, Farid Najafi

e1–e5

Published online: March 20, 2015

*Preview*

The relationship between socioeconomic status and influenza vaccine uptake has a different pattern in different societies. The objective of this study was to assess the socioeconomic factors influencing influenza vaccination uptake in the older adult Iranian population.

## **American Journal of Preventive Medicine**

May 2015 Volume 48, Issue 5, p491-646, e5-e10

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

[No relevant content identified]

## **American Journal of Public Health**

Volume 105, Issue 5 (May 2015)

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

[Reviewed earlier]

**American Journal of Tropical Medicine and Hygiene**

April 2015; 92 (4)

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

[Reviewed earlier]

**Annals of Internal Medicine**

21 April 2015, Vol. 162. No. 8

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

[Reviewed earlier]

**BMC Health Services Research**

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

(Accessed 2 May 2015)

[No new relevant content identified]

**BMC Infectious Diseases**

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

(Accessed 2 May 2015)

[No new relevant content identified]

**BMC Medical Ethics**

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

(Accessed 2 May 2015)

*Research article*

**[Clinical trialist perspectives on the ethics of adaptive clinical trials: a mixed-methods analysis](#)**

Laurie J Legocki, William J Meurer, Shirley Frederiksen, Roger J Lewis, Valerie L Durkalski, Donald A Berry, William G Barsan, Michael D Fetters BMC Medical Ethics 2015, 16:27 (3 May 2015)

**BMC Pregnancy and Childbirth**

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

(Accessed 2 May 2015)

*Research article*

**[Impact of a community-based perinatal and newborn preventive care package on perinatal and neonatal mortality in a remote mountainous district in Northern Pakistan](#)**

Zahid A Memon, Gul N Khan, Sajid B Soofi, Imam Y Baig, Zulfiqar A Bhutta BMC Pregnancy & Childbirth 2015, 15:106 (30 April 2015)

*Research article*

**[Effect of an integrated maternal health intervention on skilled provider's care for maternal health in remote rural areas of Bangladesh: a pre and post study](#)**

Nafisa Huq, Anisuddin Ahmed, Nafis Haque, Moyazzam Hossaine, Jamal Uddin, Faisal Ahmed, MA Quaiyum BMC Pregnancy & Childbirth 2015, 15:104 (28 April 2015)

## **BMC Public Health**

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

(Accessed 2 May 2015)

*Research article*

### **[The role of vaccination coverage, individual behaviors, and the public health response in the control of measles epidemics: an agent-based simulation for California](#)**

Fengchen Liu, Wayne T A Enanoria, Jennifer Zipprich, Seth Blumberg, Kathleen Harriman, Sarah F Ackley, William D Wheaton, Justine L Allpress, Travis C Porco

BMC Public Health 2015, 15:447 (1 May 2015)

*Abstract (provisional)*

#### **Background**

Measles cases continue to occur among susceptible individuals despite the elimination of endemic measles transmission in the United States. Clustering of disease susceptibility can threaten herd immunity and impact the likelihood of disease outbreaks in a highly vaccinated population. Previous studies have examined the role of contact tracing to control infectious diseases among clustered populations, but have not explicitly modeled the public health response using an agent-based model.

#### **Methods**

We developed an agent-based simulation model of measles transmission using the Framework for Reconstructing Epidemiological Dynamics (FRED) and the Synthetic Population Database maintained by RTI International. The simulation of measles transmission was based on interactions among individuals in different places: households, schools, daycares, workplaces, and neighborhoods. The model simulated different levels of immunity clustering, vaccination coverage, and contact investigations with delays caused by individuals' behaviors and/or the delay in a health department's response. We examined the effects of these characteristics on the probability of uncontrolled measles outbreaks and the outbreak size in 365 days after the introduction of one index case into a synthetic population.

#### **Results**

We found that large measles outbreaks can be prevented with contact investigations and moderate contact rates by having (1) a very high vaccination coverage ( $\geq 95\%$ ) with a moderate to low level of immunity clustering ( $\leq 0.5$ ) for individuals aged less than or equal to 18 years, or (2) a moderate vaccination coverage (85% or 90%) with no immunity clustering for individuals ( $\leq 18$  years of age), a short intervention delay, and a high probability that a contact can be traced. Without contact investigations, measles outbreaks may be prevented by the highest vaccination coverage with no immunity clustering for individuals ( $\leq 18$  years of age) with moderate contact rates; but for the highest contact rates, even the highest coverage with no immunity clustering for individuals ( $\leq 18$  years of age) cannot completely prevent measles outbreaks.

#### **Conclusions**

The simulation results demonstrated the importance of vaccination coverage, clustering of immunity, and contact investigations in preventing uncontrolled measles outbreaks.

*Research article*

## **Mistrust surrounding vaccination recommendations by the Japanese government: results from a national survey of working-age individuals**

Koji Wada, Derek R Smith

BMC Public Health 2015, 15:426 (26 April 2015)

### *Abstract*

#### **Background**

Considering that public attitudes on vaccine safety and effectiveness are known to influence the success of vaccination campaigns, an increased understanding of socio-demographic characteristics might help improve future communication strategies and lead to greater rates of vaccination uptake. This study investigated associations between mistrust for governmental vaccine recommendations and the socio-demographic characteristics of working-age individuals in Japan.

#### **Methods**

A web-based, cross-sectional survey of vaccination attitudes was conducted among 3140 Japanese people aged 20 to 69 years. Multiple logistic regression analysis was used to examine statistical associations between vaccination attitudes and socio-demographic characteristics, including the participant's most trusted information resources, demographic factors and general health conditions.

#### **Results**

A total of 893 (28.4%) individuals reported a general mistrust towards the Japanese government's recommendations for vaccination. Respondents who did not trust official government sources were more likely to consider friends, the internet and books (for both genders); family members and newspapers (among women only); and television (among men only), as the most trusted resources for vaccination-related information. Relatively poor health in men was associated with a general mistrust of vaccination recommendations (adjusted Odds Ratio (aOR): 1.37, 95% Confidence Interval (95% CI): 1.07-1.69). A trend towards worsening general health was also associated with decreasing trust in vaccination recommendations by female respondents as follows: those reporting relatively good health (aOR: 1.24, 95% CI: 1.02-1.47); relatively poor health (aOR: 1.55, 95% CI: 1.22-1.90); and poor health (aOR: 2.10, 95% CI: 1.41-2.63) (p for trend < 0.05).

#### **Conclusions**

Overall, this study suggests that communication strategies for rebuilding public trust in vaccination safety need to be urgently addressed in Japan. Such protocols must consider the information sources that working-age populations are most likely to utilize in this country, as well as their general health conditions, especially among females.

## **BMC Research Notes**

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

(Accessed 2 May 2015)

#### *Research article*

## **Uptake of influenza vaccination in pregnancy amongst Australian Aboriginal and Torres Strait Islander women: a mixed-methods pilot study**

Kerry-Ann F O'Grady, Melissa Dunbar, Linda G Medlin, Kerry K Hall, Maree Toombs, Judith Meiklejohn, Lisa McHugh, Peter D Massey, Amy Creighton, Ross M Andrews BMC Research Notes 2015,

#### *Abstract (provisional)*

#### **Background**

Influenza infection during pregnancy causes significant morbidity and mortality. Immunisation against influenza is recommended during pregnancy in several countries however, there are limited data on vaccine uptake, and the determinants of vaccination, in pregnant Australian Aboriginal and/or Torres Islander women. This study aimed to collect pilot data on vaccine uptake and attitudes towards, and perceptions of, maternal influenza vaccination in this population in order to inform the development of larger studies.

#### Methods

A mixed-methods study comprised of a cross-sectional survey and yarning circles (focus groups) amongst Aboriginal and Torres Strait Islander women attending two primary health care services. The women were between 28 weeks gestation and less than 16 weeks post-birth. These data were supplemented by data collected in an ongoing national Australian study of maternal influenza vaccination. Aboriginal research officers collected community data and data from the yarning circles which were based on a narrative enquiry framework. Descriptive statistics were used to analyse quantitative data and thematic analyses were applied to qualitative data.

#### Results

Quantitative data were available for 53 women and seven of these women participated in the yarning circles. The proportion of women who reported receipt of an influenza vaccine during their pregnancy was 9/53. Less than half of the participants (21/53) reported they had been offered the vaccine in pregnancy. Forty-three percent reported they would get a vaccine if they became pregnant again. Qualitative data suggested perceived benefits to themselves and their infants were important factors in the decision to be vaccinated but there was insufficient information available to women to make that choice.

#### Conclusions

The rates of influenza immunisation may continue to remain low for Aboriginal and/or Torres Strait Islander women during pregnancy. Access to services and recommendations by a health care worker may be factors in the lower rates. Our findings support the need for larger studies directed at monitoring and understanding the determinants of maternal influenza vaccine uptake during pregnancy in Australian Aboriginal and Torres Strait Islander women. This research will best be achieved using methods that account for the social and cultural contexts of Aboriginal and Torres Strait Islander communities in Australia.

#### **BMJ Open**

2015, Volume 5, Issue 4

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

[Reviewed earlier]

#### **British Medical Journal**

02 May 2015(vol 350, issue 8006)

<http://www.bmj.com/content/350/8006>

[No relevant content identified]

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

Volume 93, Number 5, May 2015, 285-360

<http://www.who.int/bulletin/volumes/93/5/en/>

*EDITORIALS*

**Knowledge for effective action to improve the health of women, children and adolescents in the post-2015 era: a call for papers**

Flavia Bustreo & Robin Gorna

doi: 10.2471/BLT.15.156521

*Research*

**Surveys of measles vaccination coverage in eastern and southern Africa: a review of quality and methods used**

Reinhard Kaiser, Messeret E Shibeshi, Jethro M Chakauya, Emelda Dzeka, Balcha G Masresha, Fussum Daniel & Nestor Shivute

*Abstract*

**Objective**

To assess the methods used in the evaluation of measles vaccination coverage, identify quality concerns and provide recommendations for improvement.

**Methods**

We reviewed surveys that were conducted to evaluate supplementary measles immunization activities in eastern and southern Africa during 2012 and 2013. We investigated the organization(s) undertaking each survey, survey design, sample size, the numbers of study clusters and children per study cluster, recording of immunizations and methods of analysis. We documented sampling methods at the level of clusters, households and individual children. We also assessed the length of training for field teams at national and regional levels, the composition of teams and the supervision provided.

**Findings**

The surveys were conducted in Comoros, Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, Swaziland, Uganda, Zambia and Zimbabwe. Of the 13 reports we reviewed, there were weaknesses in 10 of them for ethical clearance, 9 for sample size calculation, 6 for sampling methods, 12 for training structures, 13 for supervision structures and 11 for data analysis.

**Conclusion**

We recommend improvements in the documentation of routine and supplementary immunization, via home-based vaccination cards or other records. For surveys conducted after supplementary immunization, a standard protocol is required. Finally, we recommend that standards be developed for report templates and for the technical review of protocols and reports. This would ensure that the results of vaccination coverage surveys are accurate, comparable, reliable and valuable for programme improvement.

*Research*

**A multimedia consent tool for research participants in the Gambia: a randomized controlled trial**

Muhammed Olanrewaju Afolabi, Nuala McGrath, Umberto D'Alessandro, Beate Kampmann, Egeruan B Imoukhuede, Raffaella M Ravinetto, Neal Alexander, Heidi J Larson, Daniel Chandramohan & Kalifa Bojang

*Abstract*

**Objective**

To assess the effectiveness of a multimedia informed consent tool for adults participating in a clinical trial in the Gambia.

**Methods**

Adults eligible for inclusion in a malaria treatment trial ( $n = 311$ ) were randomized to receive information needed for informed consent using either a multimedia tool (intervention arm) or a

standard procedure (control arm). A computerized, audio questionnaire was used to assess participants' comprehension of informed consent. This was done immediately after consent had been obtained (at day 0) and at subsequent follow-up visits (days 7, 14, 21 and 28). The acceptability and ease of use of the multimedia tool were assessed in focus groups.

#### Findings

On day 0, the median comprehension score in the intervention arm was 64% compared with 40% in the control arm ( $P = 0.042$ ). The difference remained significant at all follow-up visits. Poorer comprehension was independently associated with female sex (odds ratio, OR: 0.29; 95% confidence interval, CI: 0.12–0.70) and residing in Jahaly rather than Basse province (OR: 0.33; 95% CI: 0.13–0.82). There was no significant independent association with educational level. The risk that a participant's comprehension score would drop to half of the initial value was lower in the intervention arm (hazard ratio 0.22, 95% CI: 0.16–0.31). Overall, 70% (42/60) of focus group participants from the intervention arm found the multimedia tool clear and easy to understand.

#### Conclusion

A multimedia informed consent tool significantly improved comprehension and retention of consent information by research participants with low levels of literacy.

#### Systematic Reviews

### **Strategies to increase the demand for childhood vaccination in low- and middle-income countries: a systematic review and meta-analysis**

Mira Johri, Myriam Cielo Pérez, Catherine Arsenault, Jitendar K Sharma, Nitika Pant Pai, Smriti Pahwa & Marie-Pierre Sylvestre

#### Abstract

#### Objective

To investigate which strategies to increase demand for vaccination are effective in increasing child vaccine coverage in low- and middle-income countries.

#### Methods

We searched MEDLINE, EMBASE, Cochrane library, POPLINE, ECONLIT, CINAHL, LILACS, BDSP, Web of Science and Scopus databases for relevant studies, published in English, French, German, Hindi, Portuguese and Spanish up to 25 March 2014. We included studies of interventions intended to increase demand for routine childhood vaccination. Studies were eligible if conducted in low- and middle-income countries and employing a randomized controlled trial, non-randomized controlled trial, controlled before-and-after or interrupted time series design. We estimated risk of bias using Cochrane collaboration guidelines and performed random-effects meta-analysis.

#### Findings

We identified 11 studies comprising four randomized controlled trials, six cluster randomized controlled trials and one controlled before-and-after study published in English between 1996 and 2013. Participants were generally parents of young children exposed to an eligible intervention. Six studies demonstrated low risk of bias and five studies had moderate to high risk of bias. We conducted a pooled analysis considering all 11 studies, with data from 11 512 participants. Demand-side interventions were associated with significantly higher receipt of vaccines, relative risk (RR): 1.30, (95% confidence interval, CI: 1.17–1.44). Subgroup analyses also demonstrated significant effects of seven education and knowledge translation studies, RR: 1.40 (95% CI: 1.20–1.63) and of four studies which used incentives, RR: 1.28 (95% CI: 1.12–1.45).

#### Conclusion

Demand-side interventions lead to significant gains in child vaccination coverage in low- and middle-income countries. Educational approaches and use of incentives were both effective strategies.

### **Clinical Infectious Diseases (CID)**

Volume 60 Issue 10 May 15, 2015

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

#### **Effectiveness of 23-Valent Pneumococcal Polysaccharide Vaccine Against Invasive Disease and Hospital-Treated Pneumonia Among People Aged ≥65 Years: A Retrospective Case-Control Study**

Maya Leventer-Roberts, Becca S. Feldman, Ilan Brufman, Chandra J. Cohen-Stavi, Moshe Hoshen, and Ran D. Balicer

Clin Infect Dis. (2015) 60 (10): 1472-1480 doi:10.1093/cid/civ096

##### *Abstract*

This large, population-based study confirmed that the 23-valent pneumococcal polysaccharide vaccine is effective against invasive pneumococcal disease among adults aged ≥65 years. However, the vaccine was not found to be effective in preventing community-acquired pneumonia requiring hospitalization.

#### **Adverse Events Following Measles, Mumps, and Rubella Vaccine in Adults Reported to the Vaccine Adverse Event Reporting System (VAERS), 2003–2013**

Lakshmi Sukumaran, Michael M. McNeil, Pedro L. Moro, Paige W. Lewis, Scott K. Winiecki, and Tom T. Shimabukuro

Clin Infect Dis. (2015) 60 (10): e58-e65 doi:10.1093/cid/civ061

##### *Abstract*

Limited data exist on the safety of measles, mumps, and rubella (MMR) vaccine in adults. In our review of reports to the Vaccine Adverse Event Reporting System, no new or unexpected safety concerns for adult MMR vaccination were detected.

### **Clinical Therapeutics**

April 2015 Volume 37, Issue 4, p687-924

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

#### **The Impact of 2-Dose Routine Measles, Mumps, Rubella, and Varicella Vaccination in France on the Epidemiology of Varicella and Zoster Using a Dynamic Model With an Empirical Contact Matrix**

Mario J.N.M. Ouwens, Kavi J. Littlewood, Christophe Sauboin, Bertrand Téhard, François Denis, Pierre-Yves Boëlle, Sophie Alain

p816–829.e10

Published online: February 25, 2015

Open Access

##### *Preview*

Varicella has a high incidence affecting the vast majority of the population in France and can lead to severe complications. Almost every individual infected by varicella becomes susceptible to herpes zoster later in life due to reactivation of the latent virus. Zoster is characterized by pain that can be long-lasting in some cases and has no satisfactory treatment. Routine varicella vaccination can prevent varicella. The vaccination strategy of replacing both doses of measles,

mumps, and rubella (MMR) with a combined MMR and varicella (MMRV) vaccine is a means of reaching high vaccination coverage for varicella immunization.

**Cost-Effectiveness of Routine Varicella Vaccination Using the Measles, Mumps, Rubella and Varicella Vaccine in France: An Economic Analysis Based on a Dynamic Transmission Model for Varicella and Herpes Zoster**

Kavi J. Littlewood, Mario J.N.M. Ouwens, Christophe Sauboin, Bertrand Tehard, Sophie Alain, François Denis  
p830–841.e7

Published online: February 23, 2015

Open Access

*Preview*

Each year in France, varicella and zoster affect large numbers of children and adults, resulting in medical visits, hospitalizations for varicella- and zoster-related complications, and societal costs. Disease prevention by varicella vaccination is feasible, wherein a plausible option involves replacing the combined measles, mumps, and rubella (MMR) vaccine with the combined MMR and varicella (MMRV) vaccine. This study aimed to: (1) assess the cost-effectiveness of adding routine varicella vaccination through MMRV, using different vaccination strategies in France; and (2) address key uncertainties, such as the economic consequences of breakthrough varicella cases, the waning of vaccine-conferred protection, vaccination coverage, and indirect costs.

**Complexity**

March/April 2015 Volume 20, Issue 4 Pages C1–C1, 1–80

<http://onlinelibrary.wiley.com/doi/10.1002/cplx.v20.4/issuetoc>

[Reviewed earlier]

**Conflict and Health**

[Accessed 2 May 2015]

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

[No new relevant content]

**Contemporary Clinical Trials**

Volume 42, In Progress (May 2015)

<http://www.sciencedirect.com/science/journal/15517144/42>

[Reviewed earlier]

**Cost Effectiveness and Resource Allocation**

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

(Accessed 2 May 2015)

*Commentary*

**Health care: the challenge to deal with uncertainty and value judgment**

Marcos Bosi Ferraz

Cost Effectiveness and Resource Allocation 2015, 13:8 (1 May 2015)

*Abstract* (provisional)

The exponential increase of knowledge in the life sciences field, more specifically in health sciences, in the past few years has brought additional levels of complexity when deciding and implementing strategies in the health care system. A predominantly paternalistic way to decide about available options to maintain or improve individual or collective health has been moving to a shared-decision model considering the empowered patient. In spite of the reduction of uncertainty when making health and health care decisions due to the advancement in scientific methods, and, in spite of the asymmetry of information, knowledge and power to make decisions, we are progressively recognizing the importance of individuals, the target of the intervention, to express their preferences and to take an active role in the decision making process. Health care stakeholders, recognizing the scarcity of resources available and the fortunate ever increasing amount of applicable knowledge and its corresponding interventions to improve the population quantity and quality of life, should stimulate society to address and discuss health care issues that will guide critical choices and define health care priorities based mostly on judgment and the best evidence available.

#### *Research*

#### **Cost-effectiveness of live oral attenuated human rotavirus vaccine in Tanzania**

Ruhago GM, Ngalesoni FN, Robberstad B and Norheim OF Cost Effectiveness and Resource Allocation 2015, 13:7 (28 April 2015)

#### *Abstract (provisional)*

#### *Background*

Globally, diarrhoea is the second leading cause of morbidity and mortality, responsible for the annual loss of about 10% of the total global childhood disease burden. In Tanzania, Rotavirus infection is the major cause of severe diarrhoea and diarrhoeal mortality in children under five years. Immunisation can reduce the burden, and Tanzania added rotavirus vaccine to its national immunisation programme in January 2013. This study explores the cost effectiveness of introducing rotavirus vaccine within the Tanzania Expanded Programme on Immunisation (EPI).

#### *Methods*

We quantified all health system implementation costs, including programme costs, to calculate the cost effectiveness of adding rotavirus immunisation to EPI and the existing provision of diarrhoea treatment (oral rehydration salts and intravenous fluids) to children. We used ingredients and step down costing methods. Cost and coverage data were collected in 2012 at one urban and one rural district hospital and a health centre in Tanzania. We used Disability Adjusted Life Years (DALYs) as the outcome measure and estimated incremental costs and health outcomes using a Markov transition model with weekly cycles up to a five-year time horizon.

#### *Results*

The average unit cost per vaccine dose at 93% coverage is US\$ 8.4, with marked difference between the urban facility US\$ 5.2; and the rural facility US\$ 9.8. RV1 vaccine added to current diarrhoea treatment is highly cost effective compared to diarrhoea treatment given alone, with incremental cost effectiveness ratio of US\$ 112 per DALY averted, varying from US\$ 80–218 in sensitivity analysis. The intervention approaches a 100% probability of being cost effective at a much lower level of willingness-to-pay than the US\$609 per capita Tanzania gross domestic product (GDP).

#### *Conclusions*

The combination of rotavirus immunisation with diarrhoea treatment is likely to be cost effective when willingness to pay for health is higher than USD 112 per DALY. Universal coverage of the

vaccine will accelerate progress towards achievement of the child health Millennium Development Goals.

### **Current Opinion in Infectious Diseases**

April 2015 - Volume 28 - Issue 2 pp: v-v,117-198

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

[Reviewed earlier]

### **Developing World Bioethics**

April 2015 Volume 15, Issue 1 Pages ii–iii, 1–57

<http://onlinelibrary.wiley.com/doi/10.1111/dewb.2015.15.issue-1/issuetoc>

[Reviewed earlier]

### **Development in Practice**

Volume 25, Issue 4, 2015

<http://www.tandfonline.com/toc/cdip20/current>

#### **[Increasing access to rural maternal health services in Zambia through demand-side interventions](#)**

Cathy Green, Miniratu Soyoola, Mary Surridge, Abdul Razak Badru, Dynes Kaluba, Paula Quigley & Tendayi Kureya

pages 450-464

DOI:10.1080/09614524.2015.1027148

Published online: 24 Apr 2015

#### *Abstract*

This paper examines a demand-side intervention that significantly increased access to maternal health services in rural Zambia in a context where skilled birth attendance rates had been stagnant for over two decades. Aspects of the intervention design that were crucial to the programme's success were the participatory and adult learning-centred approach used to mobilise intervention communities, the use of a community volunteer model, and the design's sensitivity and responsiveness to underlying social factors and problems. The demand-side intervention is already being scaled up in six districts, and is highly suitable for national level scale-up.

### **Emerging Infectious Diseases**

Volume 21, Number 5—May 2015

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

[Reviewed earlier]

### **Epidemics**

Volume 11, In Progress (June 2015)

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

[Reviewed earlier]

**Epidemiology and Infection**

Volume 143 - Issue 07 - May 2015

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

[Reviewed earlier]

**The European Journal of Public Health**

Volume 25, Issue 2, 01 April 2015

<http://eurpub.oxfordjournals.org/content/25/2>

[Reviewed earlier]

**Eurosurveillance**

Volume 20, Issue 17, 30 April 2015

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

[No new relevant content]

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

March 2015 | Volume 3 | Issue 1

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

[Reviewed earlier]

**Global Health Governance**

<http://blogs.shu.edu/ghg/category/complete-issues/spring-autumn-2014/>

[Accessed 2 May 2015]

[No new relevant content]

**Global Public Health**

Volume 10, Issue 4, 2015

<http://www.tandfonline.com/toc/rgph20/current#.VPudJy5nBhU>

[Reviewed earlier]

**Globalization and Health**

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

[Accessed 2 May 2015]

[No new relevant content]

**Health Affairs**

April 2015; Volume 34, Issue 4

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

*Cost & Quality Of Cancer Care*

[Reviewed earlier]

## **Health and Human Rights**

Volume 16, Issue 2 December 2014

<http://www.hhrjournal.org/volume-16-issue-2/>

*Papers in Press: Special Issue on Health Rights Litigation*

[Reviewed earlier]

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

Volume 10 - Issue 02 - April 2015

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

[Reviewed earlier]

## **Health Policy and Planning**

Volume 30 Issue 3 April 2015

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

[Reviewed earlier]

## **Health Research Policy and Systems**

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

[Accessed 2 May 2015]

[Reviewed earlier]

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

Volume 11, Issue 3, 2015

<http://www.tandfonline.com/toc/khvi20/current#.VSC09OEw1hU>

[Reviewed earlier]

## **Infectious Agents and Cancer**

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

[Accessed 2 May 2015]

[No new relevant content]

## **Infectious Diseases of Poverty**

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

[Accessed 2 May 2015]

*Commentary*

### **[Sustaining the gains made in malaria control and elimination](#)**

Randall A Kramer, Adriane Lesser *Infectious Diseases of Poverty* 2015, 4:26 (3 May 2015)

*Abstract* (provisional)

Significant progress has been made in the last 25 years to reduce the malaria burden, but considerable challenges remain. These gains have resulted from large investments in a range of

control measures targeting malaria. Fana and co-authors find a strong relationship between education level and net usage with malaria parasitemia in pregnant women, suggesting the need for targeted control strategies. Mayala and co-workers find important links between agriculture and malaria with implications for inter-sectoral collaboration for malaria control.

**International Health**

Volume 7 Issue 2 March 2015

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

*Special issue: Digital methods in epidemiology*

[Reviewed earlier]

**International Journal of Epidemiology**

Volume 44 Issue 1 February 2015

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

[Reviewed earlier]

**International Journal of Infectious Diseases**

June 2015 Volume 35, p1

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

[Reviewed earlier]

**JAMA**

April 28, 2015, Vol 313, No. 16

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

[New issue; No relevant content identified]

**JAMA Pediatrics**

April 2015, Vol 169, No. 4

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

[Reviewed earlier]

**Journal of Community Health**

Volume 40, Issue 2, April 2015

<http://link.springer.com/journal/10900/40/2/page/1>

[Reviewed earlier]

**Journal of Epidemiology & Community Health**

May 2015, Volume 69, Issue 5

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

[Reviewed earlier]

**Journal of Global Ethics**

Volume 11, Issue 1, 2015

<http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8>

**Forum: The Sustainable Development Goals** [8 articles plus introduction below]

**INTRODUCTION: The Sustainable Development Goals Forum**

DOI:10.1080/17449626.2015.1021091

Eric Palmer\*

pages 3-9

***Abstract***

This introduction notes the contributions of various authors to the first issue of the Journal of Global Ethics 2015 Forum and briefly explains the United Nations process through which the sustainable development goals have been formulated up to the receipt by the General Assembly, in August 2014, of the Report of the Open Working Group of the General Assembly on Sustainable Development Goals (UN A/68/970). The goals are identified as a confluence of distinct streams of UN work attended to variously by policy experts and political figures in the past several decades. Sources include, most obviously, the Millennium Declaration of 2000 and the Millennium Development Goals, but also the 1992 United Nations Conference on Environment and Development, the Human Development Reports of 1990 forward, and the 1987 Brundtland Report.

**Journal of Global Infectious Diseases (JGID)**

January-March 2015 Volume 7 | Issue 1 Page Nos. 1-50

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

[Reviewed earlier]

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

Volume 26, Number 2, May 2015

[http://muse.jhu.edu/journals/journal\\_of\\_health\\_care\\_for\\_the\\_poor\\_and\\_underserved/toc/hpu.26.2.html](http://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.26.2.html)

[Reviewed earlier]

**Journal of Immigrant and Minority Health**

Volume 17, Issue 2, April 2015

<http://link.springer.com/journal/10903/17/2/page/1>

***Special Focus: Food, Diet, and Nutrition***

*39 articles covering these themes in different ethnic and national contexts*

[Reviewed earlier]

**Journal of Immigrant & Refugee Studies**

Volume 13, Issue 1, 2015

<http://www.tandfonline.com/toc/wimm20/current#.VQS0KOFnBhW>

[Reviewed earlier]

**Journal of Infectious Diseases**

Volume 211 Issue 9 May 1, 2015

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

[Reviewed earlier]

**The Journal of Law, Medicine & Ethics**

Spring 2015 Volume 43, Issue 1 Pages 6–166

<http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-1/issuetoc>

[Reviewed earlier]

**Journal of Medical Ethics**

May 2015, Volume 41, Issue 5

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

[New issue; No relevant content identified]

**Journal of Medical Internet Research**

Vol 17, No 4 (2015): April

<http://www.jmir.org/2015/4>

[Reviewed earlier]]

**Journal of Medical Microbiology**

April 2015; 64 (Pt 4)

<http://jmm.sgmjournals.org/content/current>

[Reviewed earlier]

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

Volume 4 Issue 1 March 2015

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

[Reviewed earlier]

**Journal of Pediatrics**

April 2015 Volume 166, Issue 4, p783-1100

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

[New issue; No relevant content]

**Journal of Public Health Policy**

Volume 36, Issue 2 (May 2015)

<http://www.palgrave-journals.com/jphp/journal/v36/n2/index.html>

[Reviewed earlier]

## **Journal of the Royal Society – Interface**

06 May 2015; volume 12, issue 106

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

[Reviewed earlier]

## **Journal of Virology**

May 2015, volume 89, issue 10

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

[New issue; No relevant content]

## **The Lancet**

May 02, 2015 Volume 385 Number 9979 p1697-1802

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

*Comment*

### **[Ageing, health, and social care: reframing the discussion](#)**

Daniel Davis, Carol Brayne

DOI: [http://dx.doi.org/10.1016/S0140-6736\(15\)60466-4](http://dx.doi.org/10.1016/S0140-6736(15)60466-4)

*Summary*

The current age structure of the UK population is radically different from that at inception of the National Health Service (NHS) in 1948, and health inequalities are widening fastest in people aged 65 years and older.<sup>1</sup> On the one hand there are fit, highly advantaged people at advanced ages for whom functional limitations and disability are postponed (ie, compression of morbidity);<sup>2</sup> and, on the other, there are those who age faster and die earlier, with a higher prevalence of chronic diseases, at least partly related to lifetimes of disadvantage and social environments that have not led to healthy ageing.

*Comment*

### **[Health and sustainable development: a call for papers](#)**

Richard Horton, Zoë Mullan

Open Access

DOI: [http://dx.doi.org/10.1016/S0140-6736\(15\)60504-9](http://dx.doi.org/10.1016/S0140-6736(15)60504-9)

In just under 5 months' time, the aspiration for the next 15 years of development efforts will be signed off at the UN General Assembly in New York, USA. These Sustainable Development Goals (SDGs) are already at an advanced stage of drafting—17 ambitious goals and 169 targets (panel), which have been criticised even by the UN General Secretary for being too voluminous.<sup>1</sup> Amid this multitude of outcomes, those pertaining to health are reduced from three Millennium Development Goals to one SDG. What does this mean for global health research?

It means an opportunity. As we concern ourselves with the prominence of health in the new agenda, it's easy to forget that (human) development is by definition people-centred, and that living a long, healthy, and creative life is its cornerstone.<sup>2</sup> The expansion of the new goals to encompass many (if not all<sup>3</sup>) of the enablers of an enriched life, for our generation and for those that follow, represents an opportunity to lift ourselves out of the silos we so decry and to embrace other disciplines that underlie the purpose of our own.

As the SDGs, in whatever final form they take, are unveiled in September, 2015, The Lancet and The Lancet Global Health will begin to curate a special issue on sustainable development,

to be published in April, 2016. As part of this special issue, we seek original research articles that cross two or more of the key disciplines of the SDGs: poverty, nutrition, health, education, economics, gender equality, water and sanitation, energy, urban planning, conservation, and climate change. Multidisciplinary authorship is a must. The deadline is Sept 15, 2015, and submissions should be made online.

#### *Articles*

#### **Oseltamivir treatment for influenza in adults: a meta-analysis of randomised controlled trials**

Joanna Dobson, MSc, Prof Richard J Whitley, MD, Prof Stuart Pocock, PhD, Prof Arnold S Monto, MD

Published Online: 29 January 2015

DOI: [http://dx.doi.org/10.1016/S0140-6736\(14\)62449-1](http://dx.doi.org/10.1016/S0140-6736(14)62449-1)

#### *Summary*

#### *Background*

Despite widespread use, questions remain about the efficacy of oseltamivir in the treatment of influenza. We aimed to do an individual patient data meta-analysis for all clinical trials comparing oseltamivir with placebo for treatment of seasonal influenza in adults regarding symptom alleviation, complications, and safety.

#### *Methods*

We included all published and unpublished Roche-sponsored randomised placebo-controlled, double-blind trials of 75 mg twice a day oseltamivir in adults. Trials of oseltamivir for treatment of naturally occurring influenza-like illness in adults reporting at least one of the study outcomes were eligible. We also searched Medline, PubMed, Embase, the Cochrane Central Register of Controlled Trials, and the [ClinicalTrials.gov](http://ClinicalTrials.gov) trials register for other relevant trials published before Jan 1, 2014 (search last updated on Nov 27, 2014). We analysed intention-to-treat infected, intention-to-treat, and safety populations. The primary outcome was time to alleviation of all symptoms analysed with accelerated failure time methods. We used risk ratios and Mantel-Haenszel methods to work out complications, admittances to hospital, and safety outcomes.

#### *Findings*

We included data from nine trials including 4328 patients. In the intention-to-treat infected population, we noted a 21% shorter time to alleviation of all symptoms for oseltamivir versus placebo recipients (time ratio 0·79, 95% CI 0·74–0·85;  $p<0·0001$ ). The median times to alleviation were 97·5 h for oseltamivir and 122·7 h for placebo groups (difference –25·2 h, 95% CI –36·2 to –16·0). For the intention-to-treat population, the estimated treatment effect was attenuated (time ratio 0·85) but remained highly significant (median difference –17·8 h). In the intention-to-treat infected population, we noted fewer lower respiratory tract complications requiring antibiotics more than 48 h after randomisation (risk ratio [RR] 0·56, 95% CI 0·42–0·75;  $p=0·0001$ ; 4·9% oseltamivir vs 8·7% placebo, risk difference –3·8%, 95% CI –5·0 to –2·2) and also fewer admittances to hospital for any cause (RR 0·37, 95% CI 0·17–0·81;  $p=0·013$ ; 0·6% oseltamivir, 1·7% placebo, risk difference –1·1%, 95% CI –1·4 to –0·3). Regarding safety, oseltamivir increased the risk of nausea (RR 1·60, 95% CI 1·29–1·99;  $p<0·0001$ ; 9·9% oseltamivir vs 6·2% placebo, risk difference 3·7%, 95% CI 1·8–6·1) and vomiting (RR 2·43, 95% CI 1·83–3·23;  $p<0·0001$ ; 8·0% oseltamivir vs 3·3% placebo, risk difference 4·7%, 95% CI 2·7–7·3). We recorded no effect on neurological or psychiatric disorders or serious adverse events.

#### *Interpretation*

Our findings show that oseltamivir in adults with influenza accelerates time to clinical symptom alleviation, reduces risk of lower respiratory tract complications, and admittance to hospital, but increases the occurrence of nausea and vomiting.

#### Funding

Multiparty Group for Advice on Science (MUGAS) foundation.

#### *Viewpoint*

#### **WHO's new End TB Strategy**

Dr Mukund Uplekar, MD, Diana Weil, MSc, Knut Lonnroth, MD, Ernesto Jaramillo, MD, Christian Lienhardt, MD, Hannah Monica Dias, MSc, Dennis Falzon, MD, Katherine Floyd, PhD, Giuliano Gargioni, MD, Haileyesus Getahun, MD, Christopher Gilpin, MD, Philippe Glaziou, MD, Malgorzata Grzemska, MD, Fuad Mirzayev, MD, Hiroki Nakatani, MD, Mario Raviglione, MD, for WHO's Global TB Programme

Published Online: 23 March 2015

DOI: [http://dx.doi.org/10.1016/S0140-6736\(15\)60570-0](http://dx.doi.org/10.1016/S0140-6736(15)60570-0)

#### *Summary*

On May 19, 2014, the 67th World Health Assembly (WHA) adopted WHO's "Global strategy and targets for tuberculosis prevention, care and control after 2015".<sup>1</sup> This post-2015 global tuberculosis strategy, labelled the End TB Strategy, was shaped during the past 2 years. A wide range of stakeholders—from ministries of health and national tuberculosis programmes to technical and scientific institutions, financial and development partners, civil society and health activists, non-governmental organisations, and the private sector—contributed to its development.

#### **The Lancet Global Health**

May 2015 Volume 3 Number 5 e240-e296

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

[Reviewed earlier]

#### **The Lancet Infectious Diseases**

May 2015 Volume 15 Number 5 p487-614

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

[Reviewed earlier]

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

Volume 19, Issue 5, May 2015

<http://link.springer.com/journal/10995/19/5/page/1>

[Reviewed earlier]

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

April 2015; 35 (3)

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

[Reviewed earlier]

**The Milbank Quarterly***A Multidisciplinary Journal of Population Health and Health Policy*

March 2015 Volume 93, Issue 1 Pages 1–222

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1468-0009/currentissue](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue)

[Reviewed earlier]

**Nature**

Volume 520 Number 7549 pp585-716 30 April 2015

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

[New issue; No relevant content identified]

**Nature Medicine**

April 2015, Volume 21 No 4 pp295-414

<http://www.nature.com/nm/journal/v21/n4/index.html>

[Reviewed earlier]

**Nature Reviews Immunology**

May 2015 Vol 15 No 5

<http://www.nature.com/nri/journal/v15/n5/index.html>

[New issue; No relevant content identified]

**New England Journal of Medicine**

April 30, 2015 Vol. 372 No. 18

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

[New issue; No relevant content identified]

**Pediatrics**

May 2015, VOLUME 135 / ISSUE 5

<http://pediatrics.aappublications.org/current.shtml>*Article***The Early Benefits of Human Papillomavirus Vaccination on Cervical Dysplasia and Anogenital Warts**

Leah M. Smith, MSc<sup>a</sup>, Erin C. Strumpf, PhD<sup>a,b</sup>, Jay S. Kaufman, PhD<sup>a</sup>, Aisha Lofters, MD, PhD<sup>c</sup>, Michael Schwandt, MD, MPH<sup>d</sup>, and Linda E. Lévesque, BScPhm, PhD<sup>e,f</sup>

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eDepartment of Public Health Sciences, Queen's University, Kingston, Ontario, Canada; and

<sup>f</sup>Institute for Clinical Evaluative Sciences-Queen's Health Services Research Facility, Kingston, Ontario, Canada

*Abstract*

**BACKGROUND:** Despite widespread promotion of quadrivalent human papillomavirus (qHPV) vaccination for young girls, there is limited information on the vaccine's real-world effectiveness and none on the effectiveness of qHPV vaccination programs. We assessed the impact of the qHPV vaccine and Ontario's grade 8 qHPV vaccination program on cervical dysplasia and anogenital warts (AGW).

**METHODS:** By using administrative health databases of Ontario, Canada, we identified a population-based retrospective cohort of girls in grade 8 before (2005/2006–2006/2007) and after (2007/2008–2008/2009) program implementation. Vaccine exposure was ascertained in grades 8 to 9 and outcomes in grades 10 to 12. A quasi-experimental approach known as regression discontinuity was used to estimate absolute risk differences (RDs), relative risks (RRs), and 95% confidence intervals (CIs) attributable to vaccination and program eligibility (intention-to-treat analysis).

**RESULTS:** The cohort comprised 131 781 ineligible and 128 712 eligible girls (n = 260 493). We identified 2436 cases of dysplasia and 400 cases of AGW. Vaccination significantly reduced the incidence of dysplasia by 5.70 per 1000 girls (95% CI –9.91 to –1.50), corresponding to a relative reduction of 44% (RR 0.56; 95% CI 0.36 to 0.87). Program eligibility also had a significant protective effect on dysplasia: RD –2.32/1000 (95% CI –4.02 to –0.61); RR 0.79 (95% CI 0.66 to 0.94). Results suggested decreases in AGW attributable to vaccination (RD –0.83/1000, 95% CI –2.54 to 0.88; RR 0.57, 95% CI 0.20 to 1.58) and program eligibility (RD –0.34/1000, 95% CI –1.03 to 0.36; RR 0.81, 95% CI 0.52 to 1.25).

**CONCLUSIONS:** This study provides strong evidence of the early benefits of qHPV vaccination among girls aged 14 to 17 years, offering additional justification for not delaying vaccination

*Article*

**Childhood Vaccination Coverage Rates Among Military Dependents in the United States**

Angela C. Dunn, MD, MPH<sub>a,b</sub>, Carla L. Black, PhD, MPH<sub>c</sub>, John Arnold, MD<sub>d</sub>, Stephanie Brodine, MD<sub>b</sub>, Jill Waalen, MD, MPH<sub>a,b</sub>, and Nancy Binkin, MD, MPH<sub>b</sub>

*Author Affiliations*

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<sup>b</sup>Graduate School of Public Health, San Diego State University, San Diego, California;

<sup>c</sup>Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases, Atlanta, Georgia; and

<sup>d</sup>Department of Pediatrics, Naval Medical Center San Diego, San Diego, California

*Abstract*

**BACKGROUND AND OBJECTIVES:** The Military Health System provides universal coverage of all recommended childhood vaccinations. Few studies have examined the effect that being insured by the Military Health System has on childhood vaccination coverage. The purpose of this study was to compare the coverage of the universally recommended vaccines among military dependents versus other insured and uninsured children using a nationwide sample of children.

**METHODS:** The National Immunization Survey is a multistage, random-digit dialing survey designed to measure vaccination coverage estimates of US children aged 19 to 35 months old. Data from 2007 through 2012 were combined to permit comparison of vaccination coverage among military dependent and all other children.

**RESULTS:** Among military dependents, 28.0% of children aged 19 to 35 months were not up to date on the 4:3:1:3:3:1 vaccination series excluding *Haemophilus influenzae* type b vaccine compared with 21.1% of all other children (odds ratio: 1.4; 95% confidence interval: 1.2–1.6). After controlling for sociodemographic characteristics, compared with all other US children, military dependent children were more likely to be incompletely vaccinated (odds ratio: 1.3; 95% confidence interval: 1.1–1.5).

**CONCLUSIONS:** Lower vaccination coverage rates among US military dependent children might be due to this population being highly mobile. However, the lack of a military-wide childhood immunization registry and incomplete documentation of vaccinations could contribute to the lower vaccination coverage rates seen in this study. These results suggest the need for further investigation to evaluate vaccination coverage of children with complete ascertainment of vaccination history, and if lower immunization rates are verified, assessment of reasons for lower vaccination coverage rates among military dependent children.

*Article*

**First Use of a Serogroup B Meningococcal Vaccine in the US in Response to a University Outbreak**

Lucy A. McNamara, PhD, MS<sub>a,b</sub>, Alice M. Shumate, PhD<sub>a,c</sub>, Peter Johnsen, MD<sub>d</sub>, Jessica R. MacNeil, MPH<sub>b</sub>, Manisha Patel, MD<sub>b</sub>, Tina Bhavsar, PharmD<sub>e</sub>, Amanda C. Cohn, MD<sub>b</sub>, Jill Dinitz-Sklar, MPH<sub>c,f</sub>, Jonathan Duffy, MD, MPH<sub>g</sub>, Janet Finnie, MBA, LSW<sub>d</sub>, Denise Garon, MSc, Robert Harry, MA, MBA<sub>h</sub>, Fang Hu, PhD<sub>b</sub>, Hajime Kamiya, MD, PhD, MPH<sub>a,b</sub>, Hye-Joo Kim, PharmD<sub>e</sub>, John Kolligian Jr, PhD<sub>d</sub>, Janet Neglia, MD<sub>d</sub>, Judith Oakleyd, Jacqueline Wagner, MS<sub>d</sub>, Kathy Wagner, MPH<sub>d</sub>, Xin Wang, PhD<sub>b</sub>, Yon Yu, PharmD<sub>e</sub>, Barbara Montana, MD, MPH<sub>c</sub>, Christina Tan, MD, MPH<sub>c</sub>, Robin Izzo, MS<sub>d</sub>, and Thomas A. Clark, MD, MPH<sub>b</sub>

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dPrinceton University, Princeton, New Jersey;

fMercer County Division of Public Health, Trenton, New Jersey; and

hPrinceton Health Department, Princeton, New Jersey

*Abstract*

**BACKGROUND:** In 2013–2014, an outbreak of serogroup B meningococcal disease occurred among persons linked to a New Jersey university (University A). In the absence of a licensed serogroup B meningococcal (MenB) vaccine in the United States, the Food and Drug Administration authorized use of an investigational MenB vaccine to control the outbreak. An investigation of the outbreak and response was undertaken to determine the population at risk and assess vaccination coverage.

**METHODS:** The epidemiologic investigation relied on compilation and review of case and population data, laboratory typing of meningococcal isolates, and unstructured interviews with university staff. Vaccination coverage data were collected during the vaccination campaign held under an expanded-access Investigational New Drug protocol.

**RESULTS:** Between March 25, 2013, and March 10, 2014, 9 cases of serogroup B meningococcal disease occurred in persons linked to University A. Laboratory typing results were identical for all 8 isolates available. Through May 14, 2014, 89.1% coverage with the 2-

dose vaccination series was achieved in the target population. From the initiation of MenB vaccination through February 1, 2015, no additional cases of serogroup B meningococcal disease occurred in University A students. However, the ninth case occurred in March 2014 in an unvaccinated close contact of University A students.

**CONCLUSIONS:** No serogroup B meningococcal disease cases occurred in persons who received 1 or more doses of 4CMenB vaccine, suggesting 4CMenB may have protected vaccinated individuals from disease. However, the ninth case demonstrates that carriage of serogroup B *Neisseria meningitidis* among vaccinated persons was not eliminated.

## **Pharmaceutics**

Volume 7, Issue 2 (June 2015), Pages 10-

<http://www.mdpi.com/1999-4923/7/2>

[No new relevant content]

## **Pharmacoconomics**

Volume 33, Issue 5, May 2015

<http://link.springer.com/journal/40273/33/5/page/1>

### **A Review and Classification of Approaches for Dealing with Uncertainty in Multi-Criteria Decision Analysis for Healthcare Decisions**

Henk Broekhuizen, Catharina G. M. Groothuis-Oudshoorn, Janine A. van Til, J. Marjan Hummel,  
*Abstract*

Multi-criteria decision analysis (MCDA) is increasingly used to support decisions in healthcare involving multiple and conflicting criteria. Although uncertainty is usually carefully addressed in health economic evaluations, whether and how the different sources of uncertainty are dealt with and with what methods in MCDA is less known. The objective of this study is to review how uncertainty can be explicitly taken into account in MCDA and to discuss which approach may be appropriate for healthcare decision makers. A literature review was conducted in the Scopus and PubMed databases. Two reviewers independently categorized studies according to research areas, the type of MCDA used, and the approach used to quantify uncertainty.

Selected full text articles were read for methodological details. The search strategy identified 569 studies. The five approaches most identified were fuzzy set theory (45 % of studies), probabilistic sensitivity analysis (15 %), deterministic sensitivity analysis (31 %), Bayesian framework (6 %), and grey theory (3 %). A large number of papers considered the analytic hierarchy process in combination with fuzzy set theory (31 %). Only 3 % of studies were published in healthcare-related journals. In conclusion, our review identified five different approaches to take uncertainty into account in MCDA. The deterministic approach is most likely sufficient for most healthcare policy decisions because of its low complexity and straightforward implementation. However, more complex approaches may be needed when multiple sources of uncertainty must be considered simultaneously.

## **PLoS Currents: Outbreaks**

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

(Accessed 2 May 2015)

### **2014 Ebola Outbreak: Media Events Track Changes in Observed Reproductive Number**

April 28, 2015 · Commentary

In this commentary, we consider the relationship between early outbreak changes in the observed reproductive number of Ebola in West Africa and various media reported interventions and aggravating events. We find that media reports of interventions that provided education, minimized contact, or strengthened healthcare were typically followed by sustained transmission reductions in both Sierra Leone and Liberia. Meanwhile, media reports of aggravating events generally preceded temporary transmission increases in both countries. Given these preliminary findings, we conclude that media reported events could potentially be incorporated into future epidemic modeling efforts to improve mid-outbreak case projections.

**PLoS Medicine**

(Accessed 2 May 2015)

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

[No new relevant content]

**PLoS Neglected Tropical Diseases**

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

(Accessed 2 May 2015)

[No new relevant content]

**PLoS One**

[Accessed 2 May 2015]

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

**[Health Providers' Perceptions of Clinical Trials: Lessons from Ghana, Kenya and Burkina Faso](#)**

Vibian Angwenyi, Kwaku-Poku Asante, Abdoulaye Traoré, Lawrence Gyabaa Febir, Charlotte Tawiah, Anthony Kwarteng, Alphonse Ouédraogo, Sodionmon Bienvenue Sirima, Seth Owusu-Agyei, Egeruan Babatunde Imoukhuede, Jayne Webster, Daniel Chandramohan, Sassy Molyneux, Caroline Jones

Research Article | published 01 May 2015 | PLOS ONE 10.1371/journal.pone.0124554

***Abstract***

**Background**

Clinical trials conducted in Africa often require substantial investments to support trial centres and public health facilities. Trial resources could potentially generate benefits for routine health service delivery but may have unintended consequences. Strengthening ethical practice requires understanding the potential effects of trial inputs on the perceptions and practices of routine health care providers. This study explores the influence of malaria vaccine trials on health service delivery in Ghana, Kenya and Burkina Faso.

**Methods**

We conducted: audits of trial inputs in 10 trial facilities and among 144 health workers; individual interviews with frontline providers (n=99) and health managers (n=14); and group discussions with fieldworkers (n=9 discussions). Descriptive summaries were generated from audit data. Qualitative data were analysed using a framework approach.

**Results**

Facilities involved in trials benefited from infrastructure and equipment upgrades, support with essential drugs, access to trial vehicles, and placement of additional qualified trial staff. Qualified trial staff in facilities were often seen as role models by their colleagues; assisting with supportive supervision and reducing facility workload. Some facility staff in place before the trial also received formal training and salary top-ups from the trials. However, differential access to support caused dissatisfaction, and some interviewees expressed concerns about what would happen at the end of the trial once financial and supervisory support was removed.

#### Conclusion

Clinical trials function as short-term complex health service delivery interventions in the facilities in which they are based. They have the potential to both benefit facilities, staff and communities through providing the supportive environment required for improvements in routine care, but they can also generate dissatisfaction, relationship challenges and demoralisation among staff. Minimising trial related harm and maximising benefits requires careful planning and engagement of key actors at the outset of trials, throughout the trial and on its' completion.

#### **PLoS Pathogens**

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

(Accessed 2 May 2015)

#### **Ebola Virus Entry: A Curious and Complex Series of Events**

Sven Moller-Tank, Wendy Maury

Pearls | published 30 Apr 2015 | PLOS Pathogens 10.1371/journal.ppat.1004731

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

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

(Accessed 2 May 2015)

[No new relevant content identified]

#### **Pneumonia**

Vol 6 (2015)

<https://pneumonia.org.au/index.php/pneumonia/issue/current>

[Reviewed earlier]

#### **Proceedings of the Royal Society B**

07 May 2015; volume 282, issue 1806

<http://rspb.royalsocietypublishing.org/content/282/1806?current-issue=y> [Reviewed earlier]

#### **Public Health Ethics**

Volume 8 Issue 1 April 2015

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

[Reviewed earlier]

**Qualitative Health Research**

May 2015; 25 (5)

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

[Reviewed earlier]

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

February 2015 Vol. 37, No. 2

[Reviewed earlier]

**Risk Analysis**

March 2015 Volume 35, Issue 3 Pages 345–554

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2015.35.issue-3/issuetoc>

[New issue; No relevant content identified]

**Science**

1 May 2015 vol 348, issue 6234, pages 473-604

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

*Infectious Diseases***[In Guinea, a long, difficult road to zero Ebola cases](#)**

Martin Enserink\*

Ebola is on the decline in Guinea, one of three West African hit hard by the epidemic. The country's teeming capital of 2 million, Conakry, had only a single known case last week. As part of the endgame, hundreds of local workers have gone house to house in the remaining Ebola pockets in recent weeks to explain how Ebola spreads, encourage people to report suspected cases, and try to find any hidden Ebola patients or corpses. Distrust of the government, resentment against teams raising awareness, and rumors about the origins of the epidemic are still a problem.

**Social Science & Medicine**

Volume 132, Pages 1-286 (May 2015)

<http://www.sciencedirect.com/science/journal/02779536/132>

[Reviewed earlier]

**Tropical Medicine and Health**

Vol. 43(2015) No. 1

[https://www.jstage.jst.go.jp/browse/tmh/43/0/\\_contents](https://www.jstage.jst.go.jp/browse/tmh/43/0/_contents)

[Reviewed earlier]

**Tropical Medicine & International Health**

May 2015 Volume 20, Issue 5 Pages 553–680

<http://onlinelibrary.wiley.com/doi/10.1111/tmi.2015.20.issue-5/issuetoc>

[Reviewed earlier]

## **Vaccine**

Volume 33, Issue 21, Pages 2395-2516 (15 May 2015)

<http://www.sciencedirect.com/science/journal/0264410X/33>

### **Internet activity as a proxy for vaccination compliance**

Pages 2395-2398

Yuval Barak-Corren, Ben Y. Reis

#### *Highlights*

:: In Summer 2013 poliovirus was detected in Israel's sewage system. In response, a nation-wide immunization campaign was launched.

:: We analyzed Internet search statistics by district for polio-related terms for the time period of this campaign.

:: We compared Internet search statistics with official reporting obtained from the MOH.

:: Internet searches were highly correlated with same district MOH reported vaccination rates ( $R = 0.786$ ).

:: These findings suggest a novel method for monitoring vaccination campaigns.

### **Varicella in Europe—A review of the epidemiology and experience with vaccination**

Review Article

Pages 2406-2413

Ida Glode Helmuth, Anja Poulsen, Camilla Hiul Suppli, Kåre Mølbak

#### *Abstract*

There is no consensus as regards the European varicella immunisation policy; some countries have introduced varicella vaccination in their routine childhood immunisation programs whereas others have decided against or are debating. With the aim of providing an overview of the epidemiology of varicella in Europe and addressing the different strategies and the experiences so far, we performed a review of epidemiological studies done in Europe from 2004 to 2014.

Varicella is mainly a disease of childhood, but sero-epidemiological studies show regional differences in the proportion of susceptible adults. Hospitalisation due to varicella is not common, but complications and hospitalisation mainly affect previously healthy children, which underlines the importance of not dismissing varicella as a disease of little importance. The experience with universal vaccination in Europe shows that vaccination leads to a rapid reduction of disease incidence. Vaccine effectiveness is high and a protective herd effect is obtained. Experience with vaccination in Europe has not been long enough, though, to draw conclusions on benefits and drawbacks with vaccination as well as the capacity for national programs in Europe to maintain a sufficiently high coverage to prevent a change in age group distribution to older children and young adults or on the impact that varicella immunisation may have on the epidemiology of shingles.

### **Actions improving HPV vaccination uptake – Results from a national survey in Italy**

Original Research Article

Pages 2425-2431

Cristina Giambi, Martina Del Manso, Fortunato D'Ancona, Barbara De Mei, Ilaria Giovannelli, Chiara Cattaneo, Valentina Possenti, Silvia Dedlich, Local representatives for VALORE

#### *Abstract*

Background

In Italy, HPV vaccination is offered to 11-year-old girls since 2007. In 2012 coverage was 69%. Strategies for offering and promoting HPV vaccination and coverage rates (26–85%) vary among Regions and Local Health Authorities (LHAs). We conducted a national study to identify strategies to improve HPV vaccination uptake.

#### Methods

In 2011–2012 we invited the 178 LHAs to fill a web-questionnaire, inquiring implementation of HPV vaccination campaigns (immunization practices, logistics of vaccine delivery, training, activities to promote vaccination, barriers, local context). We described type of offer and vaccination promotion in each LHA and studied the association of these factors with vaccination coverage rates.

#### Results

We analyzed 133 questionnaires. The communication tools more frequently used to promote vaccination were: brochures/leaflets (92% of LHAs), fliers/posters (72%). Television (24%) and radio (15%) were less used. Using  $\geq 3$  communication channels was associated to a coverage  $\geq 70\%$  ( $OR_{adj} = 5.9$ , 95%CI 2.0–17.4). The probability to reach a coverage  $\geq 70\%$  was higher if the invitation letter indicated a pre-assigned date for HPV vaccination ( $OR_{adj} = 7.0$ , 95%CI 1.2–39.8) and  $>1$  recall for non-respondents was planned ( $OR_{adj} = 4.1$ , 95%CI 1.8–9.3).

Immunization services and paediatricians were involved in informative and training activities in most LHAs (80–90%), instead general practitioners, women and family's healthcare services and public gynaecologists in 60–70%, cervical cancer screening services and private gynaecologists in 20–40%. The main factors that negatively affected vaccination uptake were: poor participation to training events of professional profiles different from personnel of immunization services (reported by 58% LHAs), their mistrust towards HPV vaccination (55%) and insufficient resources (56%).

#### Conclusion

The synergy of multiple interventions is necessary for a successful vaccination programme. Practices such as pre-assigning vaccination date and repeatedly recalling non-respondents could improve vaccination uptake. Efforts are required to strengthen the training of different professional profiles and services and encourage their collaboration. Economical resources are needed to promote vaccination.

### **Effectiveness of an oral cholera vaccine campaign to prevent clinically-significant cholera in Odisha State, India**

Original Research Article

Pages 2463-2469

Thomas F. Wierzba, Shantanu K. Kar, Vijayalaxmi V. Mogasale, Anna S. Kerketta, Young Ae You, Prameela Baral, Hemant K. Khuntia, Mohammad Ali, Yang Hee Kim, Shyam Bandhu Rath, Anuj Bhattachan, Binod Sah

#### Abstract

##### Background

A clinical trial conducted in India suggests that the oral cholera vaccine, Shanchol, provides 65% protection over five years against clinically-significant cholera. Although the vaccine is efficacious when tested in an experimental setting, policymakers are more likely to use this vaccine after receiving evidence demonstrating protection when delivered to communities using local health department staff, cold chain equipment, and logistics.

#### Methods

We used a test-negative, case-control design to evaluate the effectiveness of a vaccination campaign using Shanchol and validated the results using a cohort approach that addressed disparities in healthcare seeking behavior. The campaign was conducted by the local health

department using existing resources in a cholera-endemic area of Puri District, Odisha State, India. All non-pregnant residents one year of age and older were offered vaccine. Over the next two years, residents seeking care for diarrhea at one of five health facilities were asked to enroll following informed consent. Cases were patients seeking treatment for laboratory-confirmed *V. cholera*-associated diarrhea. Controls were patients seeking treatment for *V. cholerae* negative diarrhea.

#### Results

Of 51,488 eligible residents, 31,552 individuals received one dose and 23,751 residents received two vaccine doses. We identified 44 *V. cholerae* O1-associated cases and 366 non *V. cholerae* diarrhea controls. The adjusted protective effectiveness for persons receiving two doses was 69.0% (95% CI: 14.5% to 88.8%), which is similar to the adjusted estimates obtained from the cohort approach. A statistical trend test suggested a single dose provided a modicum of protection (33%, test for trend,  $p = 0.0091$ ).

#### Conclusion

This vaccine was found to be as efficacious as the results reported from a clinical trial when administered to a rural population using local health personnel and resources. This study provides evidence that this vaccine should be widely deployed by public health departments in cholera endemic areas.

### **Evaluation of anthrax vaccine safety in 18 to 20 year olds: A first step towards age de-escalation studies in adolescents**

Original Research Article

Pages 2470-2476

James C. King Jr., M.D., Yonghong Gao Ph.D., Conrad P. Quinn Ph.D., Thomas M. Dreier Ph.D., Cabrini Vianney M.S., Eric M. Espeland Ph.D.

#### *Abstract*

#### Background/objectives

Anthrax vaccine adsorbed (AVA, BioThrax®) is recommended for post-exposure prophylaxis administration for the US population in response to large-scale *Bacillus anthracis* spore exposure. However, no information exists on AVA use in children and ethical barriers exist to performing pre-event pediatric AVA studies. A Presidential Ethics Commission proposed a potential pathway for such studies utilizing an age de-escalation process comparing safety and immunogenicity data from 18 to 20 year-olds to older adults and if acceptable proceeding to evaluations in younger adolescents. We conducted exploratory summary re-analyses of existing databases from 18 to 20 year-olds ( $n = 74$ ) compared to adults aged 21 to 29 years ( $n = 243$ ) who participated in four previous US government funded AVA studies.

#### Methods

Data extracted from studies included elicited local injection-site and systemic adverse events (AEs) following AVA doses given subcutaneously at 0, 2, and 4 weeks. Additionally, proportions of subjects with  $\geq 4$ -fold antibody rises from baseline to post-second and post-third AVA doses (seroresponse) were obtained.

#### Results

Rates of any elicited local AEs were not significantly different between younger and older age groups for local events (79.2% vs. 83.8%,  $P = 0.120$ ) or systemic events (45.4% vs. 50.5%,  $P = 0.188$ ). Robust and similar proportions of seroresponses to vaccination were observed in both age groups.

#### Conclusions

AVA was safe and immunogenic in 18 to 20 year-olds compared to 21 to 29 year-olds. These results provide initial information to anthrax and pediatric specialists if AVA studies in adolescents are required.

### **Early exposure to the combined measles–mumps–rubella vaccine and thimerosal-containing vaccines and risk of autism spectrum disorder**

Original Research Article

Pages 2511-2516

Yota Uno, Tokio Uchiyama, Michiko Kurosawa, Branko Aleksic, Norio Ozaki

#### *Abstract*

#### *Objective*

This case–control study investigated the relationship between the risk of Autism Spectrum Disorder (ASD) onset, and early exposure to the combined Measles–Mumps–Rubella (MMR) vaccine and thimerosal consumption measured from vaccinations in the highly genetically homogenous Japanese population.

#### *Methods*

Vaccination histories at 1, 3, 6, 12, 18, 24, and 36 months from birth were investigated in ASD cases (189 samples), and controls (224 samples) matching age and sex in each case. Crude odds ratios (ORs) and 95% confidence intervals (95% CIs) were calculated to determine relationship between MMR vaccination and ASD. The differences in mean values of the thimerosal dosage between cases and controls were analyzed using an unpaired t-test. MMR vaccination and thimerosal dosage were also investigated using a conditional multiple-regression model.

#### *Results*

There were no significant differences in MMR vaccination and thimerosal dosage between cases and controls at any age. Furthermore, the ORs (95% CIs) of MMR vaccination and thimerosal dosage associated with ASD in the conditional multiple regression model were, respectively, 0.875 (0.345–2.222) and 1.205 (0.862–1.683) at age 18 months, 0.724 (0.421–1.243) and 1.343 (0.997–1.808) at 24 months, and 1.040 (0.648–1.668) and 0.844 (0.632–1.128) at 36 months. Thus, there were no significant differences.

#### *Conclusions*

No convincing evidence was found in this study that MMR vaccination and increasing thimerosal dose were associated with an increased risk of ASD onset.

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

(Accessed 2 May 2015)

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

[No new relevant content identified]

### **Value in Health**

March 2015 Volume 18, Issue 2, p137-354

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

[Reviewed earlier]

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

**PLoS Computational Biology**

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

*Research Article*

**[A change in vaccine efficacy and duration of protection explains recent rises in pertussis incidence in the United States.](#)**

Manoj Gambhir , Thomas A. Clark, Simon Cauchemez, Sara Y. Tartof, David L. Swerdlow, Neil M. Ferguson

Published: April 23, 2015

DOI: 10.1371/journal.pcbi.1004138

*Abstract*

Over the past ten years the incidence of pertussis in the United States (U.S.) has risen steadily, with 2012 seeing the highest case number since 1955. There has also been a shift over the same time period in the age group reporting the largest number of cases (aside from infants), from adolescents to 7–11 year olds. We use epidemiological modelling and a large case incidence dataset to explain the upsurge. We investigate several hypotheses for the upsurge in pertussis cases by fitting a suite of dynamic epidemiological models to incidence data from the National Notifiable Disease Surveillance System (NNDSS) between 1990–2009, as well as incidence data from a variety of sources from 1950–1989. We find that: the best-fitting model is one in which vaccine efficacy and duration of protection of the acellular pertussis (aP) vaccine is lower than that of the whole-cell (wP) vaccine, (efficacy of the first three doses 80% [95% CI: 78%, 82%] versus 90% [95% CI: 87%, 94%]), increasing the rate at which disease is reported to NNDSS is not sufficient to explain the upsurge and 3) 2010–2012 disease incidence is predicted well. In this study, we use all available U.S. surveillance data to: 1) fit a set of mathematical models and determine which best explains these data and 2) determine the epidemiological and vaccine-related parameter values of this model. We find evidence of a difference in efficacy and duration of protection between the two vaccine types, wP and aP (aP efficacy and duration lower than wP). Future refinement of the model presented here will allow for an exploration of alternative vaccination strategies such as different age-spacings, further booster doses, and cocooning.

*Author Summary*

Over the past ten years the incidence of pertussis in the United States (U.S.) has risen steadily, with 2012 seeing the highest case number since 1955. There has also been a shift over the same time period in the age group reporting the largest number of cases (aside from infants), from adolescents to 7–11 year olds. We investigate several hypotheses for the upsurge in pertussis cases by fitting a suite of epidemiological models to incidence data from the National Notifiable Disease Surveillance System (NNDSS) between 1990–2009. We find that: 1) the best-fitting model is one in which the vaccine efficacy and duration of protection of the acellular pertussis vaccine is lower than that of the whole-cell vaccine, 2) increasing the rate at which disease is reported to NNDSS is not sufficient to explain the upsurge and 3) 2010–2012 disease incidence is predicted well. These results demonstrate that the resurgence in pertussis in the U.S. can be explained by past changes in vaccination policy. However, our findings suggest that the efficacy of the currently-used acellular vaccine is not much lower than that of the whole-cell vaccine, and booster doses may be sufficient to curtail epidemics while vaccine research continues.

**Special Focus Newsletters**

**Dengue Vaccine Initiative Newsletter – Spring Edition**

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**Media/Policy Watch**

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

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

**Al Jazeera**

<http://america.aljazeera.com/search.html?q=vaccine>

Accessed 2 May 2015

[No new, unique, relevant content]

**The Atlantic**

<http://www.theatlantic.com/magazine/>

Accessed 2 May 2015

[No new, unique, relevant content]

**BBC**

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

Accessed 2 May 2015

[No new, unique, relevant content]

**Brookings**

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

Accessed 2 May 2015

[No new, unique, relevant content]

**Council on Foreign Relations**

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

Accessed 2 May 2015

[No new, unique, relevant content]

**The Economist**

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

Accessed 2 May 2015

[No new, unique, relevant content]

### **Financial Times**

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

[No new, unique, relevant content]

### **Forbes**

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

*Accessed 2 May 2015*

Apr 27, 2015 11,782 views

[How To Talk To Anti-Vaccine Advocates Without Your Head Exploding](#)

Todd Essig , Contributor

Trying to talk with people who are self-righteous, certain and profoundly wrong is a toxic conversational mix. In fact, such conversations just might make your head explode. Unfortunately, the current risk of exploding heads is high because anti-vaccine advocates have mobilized to spread dangerous fear-mongering messages. Their actions are in response to others mobilizing legislative efforts to prevent more outbreaks of preventable disease, like the recent measles outbreak traced to [California's Disneyland](#). It's quite a mess. Help is needed. So, read on for advice for how to prevent cranial detonation when talking with the anti-vaxers in your life...

### **Foreign Affairs**

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

*Accessed 2 May 2015*

[No new, unique, relevant content]

### **Foreign Policy**

<http://foreignpolicy.com/>

*Accessed 2 May 2015*

*Argument*

[The Next Victims of Ebola](#)

The epidemic may be nearing “zero cases” — but it's still disrupting the delivery of vaccines for measles, polio, and other deadly childhood diseases

By [Ellen Johnson Sirleaf](#), [Seth Berkley](#)

April 27, 2015.

### **The Guardian**

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

*Accessed 2 May 2015*

[No new, unique, relevant content]

### **The Huffington Post**

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

[The Steps It Will Take to Get Every Child Vaccinated—Orin Levine](#)

27 April 2015

[Close the Immunization Gap! Get Vaccinated - Flavia Bustreo](#)

25 April 2015

**Mail & Guardian**

<http://mg.co.za/>

Accessed 2 May 2015

[No new, unique, relevant content]

**New Yorker**

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

Accessed 2 May 2015

[No new, unique, relevant content]

**New York Times**

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

Accessed 2 May 2015

[No new, unique, relevant content]

**Wall Street Journal**

[http://online.wsj.com/home-page?\\_wsjregion=na,us&homepage=/home/us](http://online.wsj.com/home-page?_wsjregion=na,us&homepage=/home/us)

Accessed 2 May 2015

[Host of Ailments Plague African Ebola Survivors](#)

*Many now declared free of virus face eye disease and vision loss*

30 April 2015

**Washington Post**

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

Accessed 2 May 2015

[No new, unique, relevant content]

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

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

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