

Center for Vaccine
Ethics and Policy



Vaccines and Global Health: The Week in Review
29 July 2017
Center for Vaccine Ethics & Policy (CVEP)

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

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

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Milestones :: Perspectives

Editor's Note:

We urge readers to invest the time necessary to read and absorb the "Five Most Important Points" below excerpted from this first report of the Transition Independent Monitoring Board (TIMB). We are reflecting on their strategic impact to the poliovirus eradication effort, early planning for GVAP 2.0, and, indeed, the "immunization enterprise" overall.

THE END OF THE BEGINNING – First Report of the Transition Independent Monitoring Board of the Polio Programme

July 2017 :: 35 pages

PDF: http://polioeradication.org/wp-content/uploads/2017/07/TIMB_Report-no1_Jul2017_EN.pdf

This report

The Transition Independent Monitoring Board (TIMB) was created by the Global Polio Eradication Programme (GPEI) to monitor and guide the process of polio transition planning. This is our first report. It provides an initial analysis of the priorities, plans, risks and opportunities as the eradication of polio appears to be drawing closer. In this first report, we have concluded by identifying areas of further work. Our subsequent reports will make recommendations for action.

FIVE MOST IMPORTANT POINTS

:: On average, 25% to 50% of staff funded through the Global Polio Eradication Initiative (GPEI) spend time on non-polio activities such as routine immunisation, broader disease surveillance, laboratory support, and responding to public health emergencies; some countries' health systems have been heavily dependent on polio funding for decades; 95% of the polio asset footprint is concentrated in 16 countries that are the most vulnerable to withdrawal of funding; many of the same countries face simultaneous withdrawal of funding from Gavi and some other sources.

:: If polio eradication succeeds but poorer countries' public health services collapse in the initiative's wake, it would be a major failure of global governance and stewardship. The risks to global health and to vulnerable populations are high if the polio transition process is mismanaged. They include: disruption of the path to eradication so that polio resurges; failure to secure and sustain staff, infrastructure and expertise necessary to detect, prevent and control other communicable diseases; direct threats to global biosecurity; rises in death rates from vaccine preventable diseases; humanitarian crises in fragile states; lost opportunities to develop health systems; a drop in resources to respond to public health crises.

:: The transition planning process initiated by the Global Polio Eradication Initiative (GPEI) is predicated on four assumptions: firstly, that to the degree possible, countries will absorb the costs of sustaining polio assets within their public health systems; secondly, that countries will prepare national plans that map out the role polio assets play in their health systems and the deficits that will be created when the GPEI closes; thirdly, that the national plans will align with

the targets laid out in the Global Vaccine Action Plan (GVAP) approved and endorsed by all WHO member states; fourthly, that by-and-large donors will be prepared to fill the gap.

:: The GPEI is not a donor. It has been a vehicle for receipt of donations and targeting expenditure for 30 years. As polio eradication nears, the GPEI's legitimacy to mobilise and oversee resources for the resulting gaps in public health provision is fading. It will not be in a position to receive, coordinate, or allocate donor funding for such purposes; soon it will not exist. Once at the end of polio eradication, funding gaps for routine immunisation and other services will be recurrent and permanent; there will be less donor tolerance towards those countries that they feel should be providing their own resources for non-polio public health services.

:: Beyond the world of polio leaders, academics, donors, and enthusiasts, there is little awareness or understanding of the enormity, complexity, and urgency of the action needed to deal effectively winding down of polio funding begun in 2017; nor is there enough appreciation that the poliovirus will not feel the need to comply with an orderly series of planned measures that will allow itself to be eradicated; polio eradication is progressing alongside polio transition planning and if the latter speeds too far ahead, there is a huge risk that resources will not be available to respond to polio and other disease outbreaks.

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[Experimental HIV vaccine regimen is well-tolerated, elicits immune responses](#)

NIH Monday, July 24, 2017

Results from early-stage NIH-funded trial support further development of candidate vaccines.

Results from an early-stage clinical trial called APPROACH show that an investigational HIV vaccine regimen was well-tolerated and generated immune responses against HIV in healthy adults. The APPROACH findings, as well as results expected in late 2017 from another early-stage clinical trial called TRAVERSE, will form the basis of the decision whether to move forward with a larger trial in southern Africa to evaluate vaccine safety and efficacy among women at risk of acquiring HIV.

The APPROACH results will be presented July 24 at the 9th International AIDS Society Conference on HIV Science in Paris.

The experimental vaccine regimens evaluated in APPROACH are based on "mosaic" vaccines designed to induce immunological responses against a wide variety of HIV subtypes responsible for HIV infections globally. Different HIV subtypes, or clades, predominate in various geographic regions around the world. The National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, funded pre-clinical development of these vaccines. Together with other partners, NIAID supported the APPROACH trial, which is sponsored by Janssen Vaccines & Prevention B.V., part of the Janssen Pharmaceutical Companies of Johnson & Johnson. The manufacture and clinical development of the mosaic vaccines are led by Janssen.

"A safe and effective HIV vaccine would be a powerful tool to reduce new HIV infections worldwide and help bring about a durable end to the HIV/AIDS pandemic," said NIAID Director

Anthony S. Fauci, M.D. "By exploring multiple promising avenues of vaccine development research, we expand our opportunities to achieve these goals."...

Johnson & Johnson Announces Encouraging First-in-Human Clinical Data for Investigational HIV Preventive Vaccine

...In Phase 1/2a APPROACH study, HIV-1 antibody response observed in all healthy volunteers

...Mosaic-based vaccine regimen is designed to elicit an immune response against a wide variety of HIV subtypes prevalent worldwide

...Positive clinical and preclinical results inform selection of lead mosaic HIV vaccine regimen for further evaluation in Phase 2b proof-of-concept study

July 24, 2017

PARIS, France--(BUSINESS WIRE)--Johnson & Johnson today announced encouraging first-in-human clinical data for an investigational HIV-1 vaccine regimen in development at its Janssen Pharmaceutical Companies. In an oral presentation of the early stage Phase 1/2a APPROACH study at the 9th IAS Conference on HIV Science (IAS 2017), the "mosaic"-based vaccine regimen from Janssen Vaccines & Prevention B.V. (Janssen) appeared to be well-tolerated and elicited HIV-1 antibody responses in 100% of healthy volunteers (n=393).

"Finding a preventive vaccine has proven to be one of the biggest scientific challenges in the 35-year quest to end the HIV pandemic. A successful preventive vaccine for HIV will need to provide broad protection against a wide range of viral strains," said Professor Dan Barouch, Harvard Medical School, Director of the Center for Virology and Vaccine Research at Beth Israel Deaconess Medical Center and a key collaborator for APPROACH. "These promising, early-stage results suggest that these vaccines utilizing mosaic immunogens should be evaluated further for their potential ability to achieve this historic goal."

Significant progress has been made in the global battle against HIV/AIDS, including the development of critical antiretroviral treatments and HIV prevention tools, yet the disease remains one of the greatest global health threats of our time. An estimated 37 million people are currently living with HIV-1 globally, and nearly 2 million people become newly infected each year. An effective HIV vaccine is elusive due to the unique properties of the virus – including its genetic diversity and ability to mutate rapidly.

Mosaic-based vaccines contain immunogens created using genes from different HIV subtypes responsible for HIV-1 infections worldwide. These immunogens are delivered through viral vectors, including Janssen's AdVac® technology based on adenovirus serotype 26 (Ad26). The viral vectors are combined with other components such as soluble proteins to form mosaic-based prime-boost vaccine regimens that first prime and then boost the immune system, with the aim of producing stronger and longer-lasting immunity to HIV.

Paul Stoffels, M.D., Chief Scientific Officer, Johnson & Johnson said, "In recent years, a new optimism has emerged that we will find an effective HIV vaccine in our lifetime. The results from today's study add to that belief and we look forward to advancing to the next stage of clinical development as quickly as possible."

In pre-clinical studies, regimens incorporating mosaic vaccines demonstrated protection against infection with an HIV-like virus. The most effective prime-boost regimen in these studies

reduced the per-exposure risk of infection by 94 percent and resulted in 66 percent complete protection after six exposures.

Based on immunologic responses observed in APPROACH, as well as protection observed in pre-clinical studies, a lead HIV-1 vaccine regimen comprising Janssen's Ad26 mosaic candidate and the Clade C gp140 soluble protein has been selected as the basis for further evaluation in a potential Phase 2b proof-of-concept efficacy study. Should this study move forward, Janssen and its global partners anticipate initiating this investigation in southern African countries in late 2017 or early 2018...

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Yemen

Statement by UNICEF Executive Director, Anthony Lake, WFP Executive Director, David Beasley and WHO Director-General, Dr Tedros Adhanom Ghebreyesus, following their joint visit to Yemen

Joint WHO/UNICEF/WFP statement

26 JULY 2017 | ADEN/SANA'A - "As the heads of three United Nations agencies – UNICEF, the World Food Programme (WFP) and WHO – we have travelled together to Yemen to see for ourselves the scale of this humanitarian crisis and to step up our combined efforts to help the people of Yemen.

"This is the world's worst cholera outbreak in the midst of the world's largest humanitarian crisis. In the last 3 months alone, 400 000 cases of suspected cholera and nearly 1900 associated deaths have been recorded. Vital health, water and sanitation facilities have been crippled by more than 2 years of hostilities, and created the ideal conditions for diseases to spread.

"The country is on the brink of famine, with over 60 per cent of the population not knowing where their next meal will come from. Nearly 2 million Yemeni children are acutely malnourished. Malnutrition makes them more susceptible to cholera; diseases create more malnutrition. A vicious combination...

"Amid this chaos, some 16 000 community volunteers go house to house, providing families with information on how to protect themselves from diarrhea and cholera. Doctors, nurses and other essential health staff are working around the clock to save lives.

"More than 30 000 health workers haven't been paid their salaries in more than 10 months, but many still report for duty. We have asked the Yemeni authorities to pay these health workers urgently because, without them, we fear that people who would otherwise have survived may die. As for our agencies, we will do our best to support these extremely dedicated health workers with incentives and stipends.

"We also saw the vital work being done by local authorities and NGOs, supported by international humanitarian agencies, including our own. We have set up more than 1000 diarrhoea treatment centres and oral rehydration corners. The delivery of food supplements, intravenous fluids and other medical supplies, including ambulances, is ongoing, as is the

rebuilding of critical infrastructure – the rehabilitation of hospitals, district health centres and the water and sanitation network. We are working with the World Bank in an innovative partnership that responds to needs on the ground and helps maintain the local health institutions.

"But there is hope. More than 99 per cent of people who are sick with suspected cholera and who can access health services are now surviving. And the total number of children who will be afflicted with severe acute malnutrition this year is estimated at 385,000.

"However, the situation remains dire. Thousands are falling sick every day. Sustained efforts are required to stop the spread of disease. Nearly 80 percent of Yemen's children need immediate humanitarian assistance.

"When we met with Yemeni leaders -- in Aden and in Sana'a -- we called on them to give humanitarian workers access to areas affected by fighting. And we urged them – more than anything – to find a peaceful political solution to the conflict.

"The Yemeni crisis requires an unprecedented response. Our 3 agencies have teamed up with the Yemeni authorities and other partners to coordinate our activities in new ways of working to save lives and to prepare for future emergencies.

"We now call on the international community to redouble its support for the people of Yemen. If we fail to do so, the catastrophe we have seen unfolding before our eyes will not only continue to claim lives but will scar future generations and the country for years to come."

[See UN OCHA – L3 Emergencies below for Yemen cholera response plan and status of OCV as an intervention]

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Emergencies

POLIO

Public Health Emergency of International Concern (PHEIC)

[Polio this week as of 19 July 2017](#) [GPEI]

:: The first report of the Transition Independent Monitoring Board (TIMB) has now been published, following the group's first meeting last month. The TIMB has been established at the request of the Polio Oversight Board (POB) to independently monitor and guide the polio transition process, especially in the 16 countries prioritized for transition planning. The group's next meeting will be held in London, United Kingdom, on 2-3 November. [More](#).

:: Five country-wide vaccination campaigns have been held in Pakistan since October 2016, preparing for the 2017 high season for poliovirus transmission, which runs from June until September. [Read more](#) about what the high season means for eradication.

:: Read the latest [polio update](#) from WHO Afghanistan to see information on cases, surveillance and vaccination campaigns for the month of June.

:: Summary of newly-reported viruses this week: Pakistan – six new wild poliovirus type 1 (WPV1)-positive environmental samples

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WHO-UNICEF: Syria cVDPV2 outbreak Situation Report # 6 25 July 2017

Key highlights

:: No new cVDPV2 cases reported this week. The total number of cVDPV2 cases remains 27 (26 cases are from Mayadeen district, Deir Ez-Zor governorate, and 1 case from Tell Abyad district, Raqqa governorate).

:: The first mOPV2 vaccination round in Deir Ez-Zor started on 22 July. A total of 59,051 children under the age of five were vaccinated on the first day of the campaign.

:: Given high temperatures, WHO has arranged for local ice-cream factories to assist in the daily freezing of ice packs.

:: Community mobilization activities continue throughout the campaign. Household visits have focused on addressing vaccine refusal through use of community influencers.

:: In addition to administering mOPV2, vaccination teams are searching for AFP cases during campaign days. An AFP case detected during vaccination visits in Mayadeen district is under investigation.

:: The total number of acute flaccid paralysis (AFP) cases detected in Deir Ez-Zor governorate since the beginning of 2017 is 89 (67 from Mayadeen, 10 from Deir Ez-Zor, and 12 from Boukamal districts). Raqqa governorate has reported 14 AFP cases (6 from Raqqa, 7 from Tell Abyad, and 1 from Thawra districts).

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WHO Grade 3 Emergencies [to 29 July 2017]

Yemen –

:: [The life and death struggle against cholera in Yemen](#) 25 July 2017

Cholera continues to spread in Yemen, causing more than 390 000 suspected cases of the disease and more than 1800 deaths since 27 April.

WHO and its partners are responding to the cholera outbreak in Yemen, working closely with UNICEF, local health authorities and others to treat the sick and stop the spread of the disease...

The Syrian Arab Republic -

:: [Read the latest WHO & UNICEF cVDPV2 outbreak situation report](#) 25 July 2017

[See Polio above for more detail]

South Sudan - *No new announcements identified.*

Iraq - *No new announcements identified.*

Nigeria - *No new announcements identified.*

WHO Grade 2 Emergencies [to 29 July 2017]

Myanmar - *No new announcements identified*

Cameroon - *No new announcements identified*

Central African Republic - *No new announcements identified.*

Democratic Republic of the Congo - *No new announcements identified*

Ethiopia - *No new announcements identified.*

Libya - *No new announcements identified.*

Niger - *No new announcements identified.*

Ukraine - *No new announcements identified*

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UN OCHA – L3 Emergencies

The UN and its humanitarian partners are currently responding to three 'L3' emergencies. This is the global humanitarian system's classification for the response to the most severe, large-scale humanitarian crises.

Iraq

:: Iraq: Mosul Humanitarian Response Situation Report No. 40 (12 to 26 July 2017)

Highlights

:: Almost 1 million people fled from western Mosul and western Ninewa Governorate as of 26 July, surpassing humanitarians' 'worst-case' estimates. Beyond Mosul, sustained efforts are now needed to support more than 700,000 people who lost everything.

:: Protection remains a top priority, especially for minority groups, women and children. The targeting of these groups is a particularly disturbing feature in Ninewa Governorate and in other areas of the country.

:: While the battle for Mosul is declared over, other areas remain under the Islamic State in Iraq and the Levant's (ISIL) control. This means civilians continue to be in danger as induced displacement, mostly from Ba'aj and Telafar, continues.

:: Outside of camps and in Mosul city water issues remain critical. This is mainly due to the logistical challenges caused by the temporary closure of Qayyarah bridge and lack of funding.

Syrian Arab Republic

:: 28 Jul 2017 2017 Regional Refugee & Resilience Plan - 3RP (all agencies) - Funding snapshot as of 27-Jul-17

:: Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, Stephen O'Brien Statement to the Security Council on the Humanitarian Situation in Syria
New York, 27 July 2017

Yemen

:: Key messages on cholera (23 July 2017)

[No reference to vaccination, immunization, OCV]

:: Joint Cholera Response Plan - Yemen - July 2017

[Excerpts referencing vaccination/OCV]

4) Oral Cholera Vaccine [p.8, 9]

Conduct risk assessment to determine locations and population eligible for vaccination, explore availability of the vaccine globally, discuss with MoPHP and other stakeholders the feasibility of a cholera vaccination campaign in high risk areas eligible to receive the vaccine...

ANNEX 6: Funding Requirements for Health and WASH Response – budget breakdown [p.29]
...*Community awareness*

23. Social mobilization and communication for OCV campaign \$500,000

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Editor's Note:

We continue to monitor how OCV is being factored into response strategies in the Yemen context. We note that the Joint Cholera Response Plan document above does not include any reference to the "much larger preventive campaign" noted below from last week's WHO situation report.

:: [WHO] Yemen cholera situation report no. 4 19 JULY 2017

Highlights [Excerpt]

:: A cholera vaccination campaign originally planned for July 2017 has been postponed at the request of the health authorities, in favour of a much larger preventive campaign next year targeting millions of Yemenis at risk of the disease.

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UN OCHA – Corporate Emergencies

When the USG/ERC declares a Corporate Emergency Response, all OCHA offices, branches and sections provide their full support to response activities both at HQ and in the field.

Ethiopia

:: Ethiopia Weekly Humanitarian Bulletin, 24 July 2017

Key Issues

:: The UN Humanitarian Coordinator allocated US\$44.7 million through the OCHA managed Ethiopia Humanitarian Fund (EHF), to address the most life-saving and time critical needs. All eligible partners are encouraged to consult respective clusters and submit their project proposal online on the Grant Management System not later than 8 August 2017.

:: An estimated US\$30 million required to assist the most vulnerable Ethiopian returnees from the Kingdom of Saudi Arabia.

:: Ethiopia continues to receive Somali and South Sudanese refugees fleeing conflict and food insecurity.

DRC

:: United Nations relief chief appeals for urgent funds for people in need in DR Congo

3.8 million people are now displaced within the Democratic Republic of the Congo

(Kinshasa/New York/Geneva, 21 July 2017): The United Nations Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, Stephen O'Brien, today wrapped up a four-day mission to the Democratic Republic of the Congo (DRC) by calling on the world "not to forget the DRC, where millions of girls, boys, women and men are suffering from violence, diseases, and malnutrition."...

Somalia

:: [Trapped in displacement: Lessons and voices from internally displaced](#) Published on 21 Jul 2017

:: [Somalia: Drought Response - Situation Report No. 15](#) Published on 24 Jul 2017

Highlights

:: While extensive humanitarian operations are ongoing, with over three million people being reached monthly with lifesaving assistance, livelihoods support and protection services, humanitarian needs are expected to persist at current levels through the end of the year. As a result of below average Gu rains, pest infestation and reduced area cultivated, overall cereal production is expected to be 50-60 percent of average, according to the Post Gu Preliminary Assessment Results by Food Security and Nutrition Analysis Unit (FSNAU).

:: Results of nutrition surveys conducted by FSNAU indicate a critical nutrition situation (Global Acute Malnutrition (WHZ) prevalence of 15 per cent or higher) in 9 out of 12 displaced people's settlements.

:: The first ever Somalia Country Humanitarian Forum was held on 19 July, in Mogadishu. The forum will now serve as an information sharing and coordination platform with international humanitarian actors.

:: On 15 July, AMISOM handed over the Somali National University to the Federal Government. The handover of the last civilian learning facility occupied by armed actors comes after over 30 years of occupation and is an important step in expanding opportunities for youth.

Nigeria

:: [The Humanitarian Coordinator for Nigeria condemns recent attacks on civilians in camps for internally displaced persons](#)

Abuja, 25 July 2017 – The Humanitarian Coordinator for Nigeria, Edward Kallon, condemns in the strongest terms the deadly suicide attacks that took place in the Dalori I and Dalori II IDP camps in the outskirts of Maiduguri, the capital of Borno State, on 24 July 2017, which resulted in the deaths of several civilians, including women and children, and injured many others. These suicide attacks are the latest in the recent accelerating trend of attacks against civilians in north-east Nigeria over the past few months...

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[**Dashboard: International Coordinating Group \(ICG\) on Vaccine Provision on cholera**](#)

[accessed 29 July 2017]

[No new request activity identified]

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Editor's Note:

We will cluster these recent emergencies as below and continue to monitor the WHO webpages for updates and key developments.

MERS-CoV [to 29 July 2017]

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

21 July 2017 WHO/MERS/RA

WHO MERS-CoV Global Summary and Assessment of Risk

Global summary

Between 2012 and 21 July 2017, 2040 laboratory-confirmed cases of Middle East respiratory syndrome-coronavirus (MERS-CoV) infection were reported to WHO, 82% of whom were reported by the Kingdom of Saudi Arabia (Figure 1). In total, cases have been reported from 27 countries in the Middle East, North Africa, Europe, the United States of America, and Asia (Table 1). Males above the age of 60 with underlying conditions, such as diabetes, hypertension and renal failure, are at a higher risk of severe disease, including death. To date, at least 710 individuals have died (crude CFR 34.8%)...

Overall, the epidemiology, transmission patterns, clinical presentation of MERS patients and viral characteristics reported since the last update are consistent with past patterns described in previous WHO risk assessments: MERS-CoV is a zoonotic virus that has repeatedly entered the human population via direct or indirect contact with infected dromedary camels in the Arabian Peninsula. Limited, non-sustained human-to-human transmission in health-care settings continue to occur, primarily in the Kingdom of Saudi Arabia,...

The continued importance of MERS-CoV in health-care settings

Since the last global update of 5 December 2016, approximately 31% of cases reported to WHO were associated with transmission in a health-care facility. These cases included health-care workers (40 cases), patients sharing rooms/wards with MERS patients, or family visitors.

Though not unexpected, these transmission events continue to be deeply concerning, given that MERS-CoV is still a relatively rare disease about which medical personnel in health-care facilities have low awareness. Globally, awareness for MERS-CoV is low and, because symptoms of MERS-CoV infection are non-specific, initial cases are sometimes easily missed. With improved compliance in infection prevention and control, namely adherence to the standard precautions at all times, human-to-human transmission in health-care facilities can be reduced and possibly eliminated with additional use of transmission-based precautions...

EBOLA/EVD [to 29 July 2017]

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

[No new digest content identified]

Zika virus [to 29 July 2017]

<http://www.who.int/csr/disease/zika/en/>

[No new digest content identified]

Yellow Fever [to 29 July 2017]

<http://www.who.int/csr/disease/yellowfev/en/>

[No new digest content identified]

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WHO & Regional Offices [to 29 July 2017]

Eliminate hepatitis: WHO

News release

27 July 2017 | GENEVA - New WHO data from 28 countries - representing approximately 70% of the global hepatitis burden - indicate that efforts to eliminate hepatitis are gaining momentum. Published to coincide with World Hepatitis Day, the data reveal that nearly all 28 countries have established high-level national hepatitis elimination committees (with plans and targets in place) and more than half have allocated dedicated funding for hepatitis responses.

On World Hepatitis Day, WHO is calling on countries to continue to translate their commitments into increased services to eliminate hepatitis. This week, WHO has also added a new generic treatment to its list of WHO-prequalified hepatitis C medicines to increase access to therapy, and is promoting prevention through injection safety: a key factor in reducing hepatitis B and C transmission.

From commitment to Action

"It is encouraging to see countries turning commitment into action to tackle hepatitis." said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. "Identifying interventions that have a high impact is a key step towards eliminating this devastating disease. Many countries have succeeded in scaling-up the hepatitis B vaccination. Now we need to push harder to increase access to diagnosis and treatment."...

Highlights

WHO prequalifies first generic hepatitis C medicine and first HIV self-test

July 2017 – In the lead-up to Paris AIDS conference, WHO today prequalified the first generic version of sofosbuvir, a critical medicine for the treatment of hepatitis C, as well as the OraQuick ® HIV Self-Test.

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Weekly Epidemiological Record, 21 July 2017, vol. 92, 29/30 (pp. 405–416)

:: Progress towards measles elimination in Bangladesh, 2000–2016

:: Performance of acute flaccid paralysis (AFP) surveillance and incidence of poliomyelitis, 2017

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WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

:: WHO participates in a forum on effective interventions to reduce harmful use of alcohol 26 July 2017

:: WHO provides lifesaving treatment for severely malnourished children with medical complication in South Sudan 26 July 2017

:: WCO Tanzania takes the Transformation Agenda forwards 26 July 2017

:: Partners agree to harmonise actions to improve the effectiveness of humanitarian efforts

Dakar, 18 July 2017 - Organisations involved in managing health emergencies and disease outbreaks in the African Region have agreed on better ways of coordinating their activities in the event of a crisis so as to save more lives and resources.

With more than 100 public health emergencies occurring each year in the African Region, the need to maximize the efficiency and effectiveness of the preparedness and response to health emergencies to meet the needs of affected communities has become paramount.

At the end of a three - day meeting in Dakar, Senegal, the Organisations agreed to undertake a number of specific joint actions in the next two years aimed at improving the quality and impact of their interventions. Some of the activities include:

- ...Mapping of partner institutions capacities in African region,
- ...Mapping of laboratory capacity in the region including diagnostics and vet labs for One Health
- ...Engaging key partners in the Pandemic Supply Chain Network Lead organizations: WFP
- ...Harmonize emergency training programs in the African region
- ...Develop repository of tools and documents for response to public health emergencies.
- ...Lead organizations: WHO AFRO , GOARN and Africa CDC

The event attracted over 70 representatives and experts from national, regional and international organizations. Among these were UNICEF, FAO, OCHA, WFP, UNHCR, IOM, MSF International, US CDC, AFENET, ALIMA, Nigeria CDC, IFRC, ARC, NICD South Africa, Institut Pasteur de Dakar, Public Health England, UVRI, KEMRI, Africa CDC, GOARN and WHO.

:: The Regional Expert Meeting on Medicine Regulatory Harmonization Initiative is being convened by IGAD 24 July 2017

WHO Region of the Americas PAHO

:: Countries of the Americas take action to eliminate hepatitis (07/28/2017)

...According to a PAHO/WHO survey in May 2017, at least 21 of the 25 countries surveyed in the Region of the Americas have created frameworks within their Ministries of Health that are now addressing and implementing hepatitis response measures.

WHO South-East Asia Region SEARO

:: Enhance awareness, action to eliminate hepatitis in South-East Asia Region 27 July 2017

WHO European Region EURO

:: World Hepatitis Day: making hepatitis elimination a reality 27-07-2017

WHO Eastern Mediterranean Region EMRO

:: WHO commemorates World Hepatitis Day in Pakistan 27 July 2017

:: Statement by UNICEF Executive Director, Anthony Lake, WFP Executive Director, David Beasley and WHO Director-General, Dr Tedros Adhanom Ghebreyesus, following their joint visit to Yemen 26 July 2017 [*See Milestones/Perspectives above for full text*]

:: GoS, WHO, FAO, and OIE fight antimicrobial resistance with new national plan 25 July 2017

WHO Western Pacific Region

No new digest content identified.

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CDC/ACIP [to 29 July 2017]

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

Press Release

July 24, 2017

[Country with world's highest HIV prevalence is now controlling its HIV epidemic](#)

New findings from Swaziland, supported by the Swazi Ministry of Health and the U.S. Centers for Disease Control and Prevention (CDC) through the President's Emergency Plan for AIDS Relief (PEPFAR), reveal remarkable progress in controlling the country's HIV epidemic and are the latest to show that global HIV efforts are helping to curb the HIV epidemic and saving lives...

[MMWR News Synopsis for July 27, 2017](#)

:: [Progress Toward Elimination of Hepatitis C Virus Infection — Georgia, 2015–2016](#)

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Announcements

[MSF/Médecins Sans Frontières](#) [to 29 July 2017]

<http://www.doctorswithoutborders.org/news-stories/press/press-releases>

Press release

[DRC: Doctors Without Borders Vaccinates More than One Million Children Against Measles](#)

July 28, 2017

As measles sweeps across Democratic Republic of Congo (DRC), more than one million children have been vaccinated against the deadly disease during a nine-month campaign by the international medical humanitarian organization Doctors Without Borders/Médecins Sans Frontières (MSF).

Press release

[MSF Sounds Alarm Over High Numbers of People Dying from AIDS in Africa](#)

July 25, 2017

Greater global attention is needed to prevent and treat AIDS, as too many patients are dying despite the availability of antiretroviral treatment.

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[CEPI – Coalition for Epidemic Preparedness Innovations](#) [to 29 July 2017]

<http://cepi.net/>

08 July 2017

[CEPI welcomes global leadership shown by government of Norway](#)

Media release, Oslo– CEPI welcomes the vital contribution of additional funding from the government of Norway, which today announced it is increasing its original investment in CEPI by \$70m. The government of Norway is a founding investor in CEPI, which will create new vaccines against epidemic threats through an innovative partnership between public, private, philanthropic and civil organizations.

Together with the governments of Germany and Japan, the Bill & Melinda Gates Foundation and Wellcome, the founding investors contributed a total of \$540m to launch CEPI in January 2017. CEPI's mission is to outsmart epidemics by developing safe and effective vaccines against

known infectious diseases that can be deployed rapidly to contain outbreaks, before they become global health emergencies...

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NIH [to 29 July 2017]

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

July 20, 2017

[Immune system may mount an attack in Parkinson's disease](#)

July 27, 2017 — NIH-funded study suggests role for specific immune cells in brain disease.

[Discovery documentary First in Human gives an up-close look at how advances in medicine are made at the NIH Clinical Center](#)

July 26, 2017 — Three-part series airing in August portrays the hopes and setbacks of patients, doctors, and nurses seeking cures.

[In adolescents, oral Truvada and vaginal ring for HIV prevention are safe, acceptable](#)

July 25, 2017 — NIH-funded clinical trials are first of their kind to include younger adolescent girls.

[NCI-COG Pediatric MATCH trial to test targeted drugs in childhood cancers](#)

July 24, 2017 — Nationwide trial to explore targeted therapies for children and adolescents with solid tumors.

[Drug interaction concerns may negatively affect HIV treatment adherence among transgender women](#)

July 24, 2017 — Participants in NIH-supported study apprehensive about combining HIV medications and hormones.

[Experimental HIV vaccine regimen is well-tolerated, elicits immune responses](#)

July 24, 2017 — Results from early-stage NIH-funded trial support further development of candidate vaccines.

[Child living with HIV maintains remission without drugs since 2008](#)

July 24, 2017 — Child treated in infancy as part of NIH-funded study.

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PATH [to 29 July 2017]

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

Announcement | July 26, 2017

[Kenya County Governor Signs Landmark Maternal Child Health and Family Planning Act](#)

The law is the first in the country to allocate county-level resources to support access to critical health services for the most vulnerable mothers, newborns, and children

Kakamega County Governor H.E. Wycliffe Oparanya of Western Kenya signed the Kakamega County Maternal Child Health and Family Planning Bill 2017 into law, guaranteeing pregnant

women living on less than one US dollar a day additional support to access essential antenatal and postnatal care for themselves and their babies. PATH Kenya advocates, UNICEF, and other partners played a key role in guiding the overarching strategy for the bill, drafting core language, and securing critical buy-in from high-level leaders and civil society members...

.....

UNAIDS [to 29 July 2017]

<http://www.unaids.org/en>

Press statement

[UNAIDS welcomes the launch of the End AIDS Coalition at the 9th International AIDS Conference on HIV Science in Paris](#)

PARIS/GENEVA, 25 July 2017—UNAIDS has welcomed the launch of the End AIDS Coalition (EAC) during the 9th International AIDS Conference on HIV Science taking place in Paris, France. The EAC brings together a strong collaboration of leading AIDS experts, scientists, clinicians, policy-makers, faith leaders, business leaders and activists determined to end the AIDS epidemic as a public health threat by 2030.

The EAC aims to amplify efforts to end the AIDS epidemic by strengthening linkages across research, resources and implementation, by encouraging the aggregation and analysis of data from the global AIDS response to identify barriers and encourage efficiencies and by inspiring a movement to mobilize and engage the next generation of young leaders in the response to HIV...

.....

FDA [to 29 July 2017]

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

What's New for Biologics

[Influenza Virus Vaccine for the 2017-2018 Season](#)

Updated: 7/27/2017

.....

European Medicines Agency [to 29 July 2017]

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

28/07/2017

[Concept paper on development and lifecycle of personalised medicines and companion diagnostics](#)

Public consultation to end on 31 October 2017 ...

27/07/2017

[EU report: more evidence on link between antibiotic use and antibiotic resistance](#)

The European Food Safety Authority, the European Medicines Agency and the European Centre for Disease Prevention and Control are concerned about the impact of use of antibiotics on the increase in antibiotic-resistant bacteria. ...

25/07/2017

[Reducing off-label use of antimicrobials in veterinary medicine to reduce risk of resistance](#)

EMA invites comments on a draft reflection paper by 31 January 2018

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GHIT Fund [to 29 July 2017]

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

GHIT was set up in 2012 with the aim of developing new tools to tackle infectious diseases that devastate the world's poorest people. Other funders include six Japanese pharmaceutical •

2017.07.25 *News*

[New investment opportunity for Hit-to-lead Platform](#)

2017.07.25 *News*

[New investment opportunity for Product Development Platform](#)

2017.07.25 *News*

[New investment opportunity for Target Research Platform in Partnership with Wellcome Trust](#)

.....

Wellcome Trust [to 29 July 2017]

<https://wellcome.ac.uk/news>

News / Published: 26 July 2017

[Mike Ferguson is new Deputy Chair of Governors](#)

Professor Mike Ferguson will become Deputy Chair of our Board of Governors in January 2018. He is taking over from Professor Dame Kay Davies.

Mike, who is Regius Professor of Life Sciences at the University of Dundee, has been on the Board of Governors since January 2012.

Opinion / Published: 26 July 2017

[Let's transform the way research is translated into health benefits](#)

Stephen Caddick, Wellcome's Director of Innovation, says building a UK environment where research findings are translated into treatments and products is a challenge – but one we must meet.

It's good to see the launch of [Transforming UK translation](#) [PDF 99KB], a set of commitments from the leading science and engineering organisations, including Wellcome, to transform UK research translation.

.....

PhRMA [to 29 July 2017]

<http://www.phrma.org/press-room>

July 27, 2017

[Biopharmaceutical industry policies aim to increase access to clinical trial data](#)

The biopharmaceutical industry has been at the forefront of initiatives to improve access to clinical trial data.

July 25, 2017

[Finding cures for incurable diseases](#)

74 percent of the medicines in the pipeline have the potential to be first-in-class therapies.

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AERAS [to 29 July 2017]
<http://www.aeras.org/pressreleases>
No new digest content identified.

BMGF - Gates Foundation [to 29 July 2017]
<http://www.gatesfoundation.org/Media-Center/Press-Releases>
No new digest content identified.

EDCTP [to 29 July 2017]
<http://www.edctp.org/>
The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials
No new digest content identified.

European Vaccine Initiative [to 29 July 2017]
<http://www.euvaccine.eu/news-events>
No new digest content identified.

Fondation Merieux [to 29 July 2017]
<http://www.fondation-merieux.org/news>
No new digest content identified.

Gavi [to 29 July 2017]
<http://www.gavi.org/library/news/press-releases/>
No new digest content identified.

Global Fund [to 29 July 2017]
<http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=>
No new digest content identified.

Hilleman Laboratories [to 29 July 2017]
<http://www.hillemanlabs.org/>
No new digest content identified.

Human Vaccines Project [to 29 July 2017]
<http://www.humanvaccinesproject.org/media/press-releases/>
No new digest content identified.

IVI [to 29 July 2017]
<http://www.ivi.int/>
No new digest content identified.

Sabin Vaccine Institute [to 29 July 2017]

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

No new digest content identified.

The Vaccine Confidence Project [to 29 July 2017]

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

No new digest content identified.

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BIO [to 29 July 2017]

<https://www.bio.org/insights/press-release>

No new digest content identified.

DCVMN – Developing Country Vaccine Manufacturers Network [to 29 July 2017]

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

25 September 2017 to 28 September 2017

DCVMN Annual General Meeting

Seoul / Korea

IFPMA [to 29 July 2017]

<http://www.ifpma.org/resources/news-releases/>

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

No new digest content identified.

* * * *

Featured Journal Content

JAMA Pediatrics

New Online - July 24, 2017

Original Investigation

Public Health and Economic Consequences of Vaccine Hesitancy for Measles in the United States

Nathan C. Lo, BS¹; Peter J. Hotez, MD, PhD^{2,3,4,5}

doi:10.1001/jamapediatrics.2017.1695

Key Points

Question

How does vaccine hesitancy affect annual measles cases and economic costs in the United States?

Findings

In this modeling study of children (age 2-11 years), a 5% reduction in measles, mumps, and rubella vaccination coverage resulted in a 3-fold increase in annual measles cases with an additional US\$2.1 million in public sector costs.

Meaning

Even small declines in vaccination coverage in children owing to vaccine hesitancy may have substantial public health and economic consequences that will be larger when considering unvaccinated infants, adolescents, and adults.

Abstract

Importance

Routine childhood vaccination is declining in some regions of the United States due to vaccine hesitancy, which risks the resurgence of many infectious diseases with public health and economic consequences. There are ongoing policy debates on the state and national level, including legislation around nonmedical (personal-belief) exemptions for childhood vaccination and possibly a special government commission on vaccine safety, which may affect vaccine coverage.

Objective

To estimate the number of measles cases in US children and the associated economic costs under scenarios of different levels of vaccine hesitancy, using the case example of measles, mumps, and rubella (MMR) vaccination and measles.

Design, Setting, and Participants

Publicly available data from the US Centers for Disease Control and Prevention were used to simulate county-level MMR vaccination coverage in children (age 2-11 years) in the United States. A stochastic mathematical model was adapted for infectious disease transmission that estimated a distribution for outbreak size as it relates to vaccine coverage. Economic costs per measles case were obtained from the literature. The predicted effects of increasing the prevalence of vaccine hesitancy as well as the removal of nonmedical exemptions were estimated. The model was calibrated to annual measles cases in US children over recent years, and the model prediction was validated using an independent data set from England and Wales.

Main Outcomes and Measures

Annual measles cases in the United States and the associated public sector costs.

Results

A 5% decline in MMR vaccine coverage in the United States would result in an estimated 3-fold increase in measles cases for children aged 2 to 11 years nationally every year, with an additional \$2.1 million in public sector costs. The numbers would be substantially higher if unvaccinated infants, adolescents, and adult populations were also considered. There was variation around these estimates due to the stochastic elements of measles importation and sensitivity of some model inputs, although the trend was robust.

Conclusions and Relevance

This analysis predicts that even minor reductions in childhood vaccination, driven by vaccine hesitancy (nonmedical and personal belief exemptions), will have substantial public health and economic consequences. The results support an urgent need to address vaccine hesitancy in policy dialogues at the state and national level, with consideration of removing personal belief exemptions of childhood vaccination.

BMC Medicine

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

(Accessed 29 July 2017)

Opinion

The public health value of vaccines beyond efficacy: methods, measures and outcomes

A. Wilder-Smith, I. Longini, P. L. Zuber, T. Bärnighausen, W. J. Edmunds, N. Dean, V. Masserey Spicher, M. R. Benissa and B. D. Gessner

BMC Medicine 2017 15:138

Published on: 26 July 2017

Abstract

Background

Assessments of vaccine efficacy and safety capture only the minimum information needed for regulatory approval, rather than the full public health value of vaccines. Vaccine efficacy provides a measure of proportionate disease reduction, is usually limited to etiologically confirmed disease, and focuses on the direct protection of the vaccinated individual. Herein, we propose a broader scope of methods, measures and outcomes to evaluate the effectiveness and public health impact to be considered for evidence-informed policymaking in both pre- and post-licensure stages.

Discussion

Pre-licensure: Regulatory concerns dictate an individually randomised clinical trial. However, some circumstances (such as the West African Ebola epidemic) may require novel designs that could be considered valid for licensure by regulatory agencies. In addition, protocol-defined analytic plans for these studies should include clinical as well as etiologically confirmed endpoints (e.g. all cause hospitalisations, pneumonias, acute gastroenteritis and others as appropriate to the vaccine target), and should include vaccine-preventable disease incidence and 'number needed to vaccinate' as outcomes.

Post-licensure: There is a central role for phase IV cluster randomised clinical trials that allows for estimation of population-level vaccine impact, including indirect, total and overall effects. Dynamic models should be prioritised over static models as the constant force of infection assumed in static models will usually underestimate the effectiveness and cost-effectiveness of the immunisation programme by underestimating indirect effects. The economic impact of vaccinations should incorporate health and non-health benefits of vaccination in both the vaccinated and unvaccinated populations, thus allowing for estimation of the net social value of vaccination.

Conclusions

The full benefits of vaccination reach beyond direct prevention of etiologically confirmed disease and often extend across the life course of a vaccinated person, prevent outcomes in the wider community, stabilise health systems, promote health equity, and benefit local and national economies. The degree to which vaccinations provide broad public health benefits is stronger than for other preventive and curative interventions.

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Journal Watch

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

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

American Journal of Infection Control

July 01, 2017 Volume 45, Issue 7, p703-818

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

[Reviewed earlier]

American Journal of Preventive Medicine

August 2017 Volume 53, Issue 2, p139-274, e35-e78

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

Research Articles

[Human Papillomavirus Vaccine Uptake: Increase for American Indian Adolescents, 2013–2015](#)

Jasmine L. Jacobs-Wingo, Cheyenne C. Jim, Amy V. Groom

p162–168

Published online: February 28, 2017

Abstract

Introduction

Although Indian Health Service, tribally-operated, and urban Indian (I/T/U) healthcare facilities have higher human papillomavirus (HPV) vaccine series initiation and completion rates among adolescent patients aged 13–17 years than the general U.S. population, challenges remain. I/T/U facilities have lower coverage for HPV vaccine first dose compared with coverage for other adolescent vaccines, and HPV vaccine series completion rates are lower than initiation rates. Researchers aimed to assist I/T/U facilities in identifying interventions to increase HPV vaccination series initiation and completion rates.

Study design

Best practice and intervention I/T/U healthcare facilities were identified based on baseline adolescent HPV vaccine coverage data. Healthcare professionals were interviewed about barriers and facilitators to HPV vaccination. Researchers used responses and evidence-based practices to identify and assist facilities in implementing interventions to increase adolescent HPV vaccine series initiation and completion. Coverage and interview data were collected from June 2013 to June 2015; data were analyzed in 2015.

Setting/participants

I/T/U healthcare facilities located within five Indian Health Service regions.

Intervention

Interventions included analyzing and providing feedback on facility vaccine coverage data, educating providers about HPV vaccine, expanding access to HPV vaccine, and establishing or expanding reminder recall and education efforts.

Main outcome measures

Impact of evidence-based strategies and best practices to support HPV vaccination.

Results

Mean baseline first dose coverage with HPV vaccine at best practice facilities was 78% compared with 46% at intervention facilities. Mean third dose coverage was 48% at best practice facilities versus 19% at intervention facilities. Intervention facilities implemented multiple low-cost, evidence-based strategies and best practices to increase vaccine coverage. At baseline, most facilities used electronic provider reminders, had standing orders in place for administering HPV vaccine, and administered tetanus, diphtheria, and acellular pertussis and HPV vaccines during the same visit. At intervention sites, mean coverage for HPV initiation and completion increased by 24% and 22%, respectively.

Conclusions

A tailored multifaceted approach addressing vaccine delivery processes and patient and provider education may increase HPV vaccine coverage.

American Journal of Public Health

August 2017 107(8)

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

AJPH HISTORY

HIV

[The End of Written Informed Consent for HIV Testing: Not With a Bang but a Whimper](#)

Ronald Bayer, Morgan Philbin and Robert H. Remien

107(8), pp. 1259–1265

Abstract

In 2014, only two states in the United States still mandated specific written informed consent for HIV testing and, after years of controversy, New York ended this requirement, leaving only Nebraska. New York's shift to opt-out testing meant that a singular feature of what had characterized the exceptionalism surrounding HIV testing was eliminated. We trace the history of debates on written informed consent nationally and in New York State. Over the years of dispute from when HIV testing was initiated in 1985 to 2014, the evidence about the benefits and burdens of written informed consent changed. Just as important was the transformation of the political configuration of HIV advocacy and funding, both nationwide and in New York State. What had for years been the subject of furious debate over what a rational and ethical screening policy required came to an end without the slightest public protest. (*Am J Public Health*. 2017;107:1259–1265. doi:10.2105/AJPH.2017.303819)

American Journal of Tropical Medicine and Hygiene

Volume 97, Issue 1, 2017

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

[Reviewed earlier]

Annals of Internal Medicine

18 July 2017 Vol: 167, Issue 2

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

[Reviewed earlier]

BMC Cost Effectiveness and Resource Allocation

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

(Accessed 29 July 2017)

[No new digest content identified]

BMJ Global Health

January 2017; volume 2, issue 1

<http://gh.bmj.com/content/2/1?current-issue=y>

[Reviewed earlier]

BMC Health Services Research

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

(Accessed 29 July 2017)

[No new digest content identified]

BMC Infectious Diseases

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

(Accessed 29 July 2017)

Research article

[Knowledge and perceptions about Zika virus in a Middle East country](#)

Zika virus, an emerging serious infectious disease, is a threat to persons living or travelling to regions where it is currently endemic, and also to contacts of infected individuals. The aim of this study was...

Sohaila Cheema, Patrick Maisonneuve, Ingmar Weber, Luis Fernandez-Luque, Amit Abraham, Hekmat Alrouh, Javaid Sheikh, Albert B. Lowenfels and Ravinder Mamtani

BMC Infectious Diseases 2017 17:524

Published on: 26 July 2017

Research article

[A cross-sectional sero-survey on preoperative HBV vaccination policy in Poland](#)

A two-dose preoperative vaccination schedule against HBV has been the widely accepted policy in Poland. However, its effectiveness has not yet been assessed.

Maria Ganczak, Marcin Korzen, Alina Jurewicz and Zbigniew Szych

BMC Infectious Diseases 2017 17:515

Published on: 25 July 2017

BMC Medical Ethics

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

(Accessed 29 July 2017)

[No new digest content identified]

BMC Medicine

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

(Accessed 29 July 2017)

Opinion

[The public health value of vaccines beyond efficacy: methods, measures and outcomes](#)

A. Wilder-Smith, I. Longini, P. L. Zuber, T. Bärnighausen, W. J. Edmunds, N. Dean, V. Masserey Spicher, M. R. Benissa and B. D. Gessner

BMC Medicine 2017 15:138

Published on: 26 July 2017

Abstract

Background

Assessments of vaccine efficacy and safety capture only the minimum information needed for regulatory approval, rather than the full public health value of vaccines. Vaccine efficacy provides a measure of proportionate disease reduction, is usually limited to etiologically confirmed disease, and focuses on the direct protection of the vaccinated individual. Herein, we propose a broader scope of methods, measures and outcomes to evaluate the effectiveness and public health impact to be considered for evidence-informed policymaking in both pre- and post-licensure stages.

Discussion

Pre-licensure: Regulatory concerns dictate an individually randomised clinical trial. However, some circumstances (such as the West African Ebola epidemic) may require novel designs that could be considered valid for licensure by regulatory agencies. In addition, protocol-defined analytic plans for these studies should include clinical as well as etiologically confirmed endpoints (e.g. all cause hospitalisations, pneumonias, acute gastroenteritis and others as appropriate to the vaccine target), and should include vaccine-preventable disease incidence and 'number needed to vaccinate' as outcomes.

Post-licensure: There is a central role for phase IV cluster randomised clinical trials that allows for estimation of population-level vaccine impact, including indirect, total and overall effects. Dynamic models should be prioritised over static models as the constant force of infection assumed in static models will usually underestimate the effectiveness and cost-effectiveness of the immunisation programme by underestimating indirect effects. The economic impact of vaccinations should incorporate health and non-health benefits of vaccination in both the vaccinated and unvaccinated populations, thus allowing for estimation of the net social value of vaccination.

Conclusions

The full benefits of vaccination reach beyond direct prevention of etiologically confirmed disease and often extend across the life course of a vaccinated person, prevent outcomes in the wider community, stabilise health systems, promote health equity, and benefit local and national economies. The degree to which vaccinations provide broad public health benefits is stronger than for other preventive and curative interventions.

Opinion

Ethics review in compassionate use

Jan Borysowski, Hans-Jörg Ehni and Andrzej Górski

BMC Medicine 2017 15:136

Published on: 24 July 2017

Abstract

Background

Compassionate use is the use of unapproved drugs outside of clinical trials. So far, compassionate use regulations have been introduced in the US, Canada, many European countries, Australia and Brazil, and treatment on a compassionate use basis may be performed in Japan and China. However, there are important differences between relevant regulations in individual countries, particularly that approval by a research ethics committee (institutional review board) is a requirement for compassionate use in some countries (e.g. the US, Spain, and Italy), but not in others (e.g. Canada, the UK, France, and Germany).

Discussion

The main objective of this article is to present aspects of compassionate use that are important for the discussion of the role of research ethics committees in the review of compassionate use. These aspects include the nature of compassionate use, potential risks to patients associated with the use of drugs with unproven safety and efficacy, informed consent, physicians' qualifications, and patient selection criteria. Our analysis indicates that the arguments for mandatory review substantially outweigh the arguments to the contrary.

Conclusions

Approval by a research ethics committee should be obligatory for compassionate use. The principal argument against mandatory ethical review of compassionate use is that it is primarily a kind of treatment rather than biomedical research. Nonetheless, compassionate use is different from standard clinical care and should be subject to review by research ethics committees. First, in practice, compassionate use often involves significant research aspects. Second, it is based on unapproved drugs with unproven safety and efficacy. Obtaining informed consent from patients seeking access to unapproved drugs on a compassionate use basis may also be difficult. Other important problems include the qualifications of the physician who is to perform treatment, and patient selection criteria.

BMC Pregnancy and Childbirth

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

(Accessed 29 July 2017)

[No new digest content identified]

BMC Public Health

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

(Accessed 29 July 2017)

[No new digest content identified]

BMC Research Notes

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

(Accessed 29 July 2017)

Research note

[Characterizing expanded access and compassionate use programs for experimental drugs](#)

We sought to determine the characteristics of "expanded access" and "compassionate use" programs registered in ClinicalTrials.gov and to determine the percentage of drugs provided through these programs that u...

Jennifer E. Miller, Joseph S. Ross, Kenneth I. Moch and Arthur L. Caplan

BMC Research Notes 2017 10:350

Published on: 28 July 2017

BMJ Open

July 2017 - Volume 7 - 7

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

[Reviewed earlier]

Bulletin of the World Health Organization

Volume 95, Number 7, July 2017, 481-544

<http://www.who.int/bulletin/volumes/95/7/en/>

[Reviewed earlier]

Child Care, Health and Development

July 2017 Volume 43, Issue 4 Pages 463–625

<http://onlinelibrary.wiley.com/doi/10.1111/cch.v43.4/issuetoc>

[Reviewed earlier]

Clinical and Experimental Vaccine Research

2017 Jan;6(1):31-37. English.

<http://ecevr.org/>

[Reviewed earlier]

Clinical Therapeutics

August 2017 Volume 39, Issue 8, Supplement, e1-e110

[http://www.clinicaltherapeutics.com/issue/S0149-2918\(17\)X0006-4](http://www.clinicaltherapeutics.com/issue/S0149-2918(17)X0006-4)

The Proceedings of the 13th Congress of the European Association for Clinical Pharmacology and Therapeutics

[Reviewed earlier]

Complexity

November/December 2016 Volume 21, Issue S2 Pages 1–642

<http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.S2/issuetoc>

[Reviewed earlier]

Conflict and Health

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

[Accessed 29 July 2017]

[No new digest content identified]

Contemporary Clinical Trials

Volume 59, Pages 1-120 (August 2017)

<http://www.sciencedirect.com/science/journal/15517144/59?sdc=1>

[No new digest content identified]

Current Opinion in Infectious Diseases

August 2017 - Volume 30 - Issue 4

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

[Reviewed earlier]

Developing World Bioethics

August 2017 Volume 17, Issue 2 Pages 61–140

<http://onlinelibrary.wiley.com/doi/10.1111/dewb.2017.17.issue-2/issuetoc>

[Reviewed earlier]

Development in Practice

Volume 27, Issue 5

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

[Reviewed earlier]

Disasters

July 2017 Volume 41, Issue 3 Pages 427–627

<http://onlinelibrary.wiley.com/doi/10.1111/disa.2017.41.issue-3/issuetoc>

[Reviewed earlier]

EMBO Reports

01 July 2017; volume 18, issue 7

<http://embor.embopress.org/content/18/7?current-issue=y>

Science & Society

[Reviewed earlier]

Emerging Infectious Diseases

Volume 23, Number 8—August 2017

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

[New issue; No digest content identified]

Epidemics

Volume 19, Pages 1-84 (June 2017)

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

[Reviewed earlier]

Epidemiology and Infection

Volume 145 - Issue 11 - August 2017

<https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue>

[New issue; No digest content identified]

The European Journal of Public Health

Volume 27, Issue 3, June 2017

<https://academic.oup.com/eurpub/issue/27/3>

[Reviewed earlier]

Global Health Action

Volume 10, 2017 – Supplement 2

<http://www.tandfonline.com/toc/zgha20/10/1?nav=toCList>

[Reviewed earlier]

Global Health: Science and Practice (GHSP)

June 27, 2017, 5 (2)

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

[Reviewed earlier]

Global Public Health

Volume 12, 2017 Issue 9

<http://www.tandfonline.com/toc/rqph20/current>

[Reviewed earlier]

Globalization and Health

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

[Accessed 29 July 2017]

[No new digest content identified]

Health Affairs

July 2017; Volume 36, Issue 7

<http://content.healthaffairs.org/content/current>
Issue Focus: Advanced Illness & End-Of-Life Care
[New issue; No digest content identified]

Health and Human Rights

Volume 19, Issue 1, June 2017
<http://www.hhrjournal.org/>
[Reviewed earlier]

Health Economics, Policy and Law

Volume 12 - Issue 3 - July 2017
<https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue>
[Reviewed earlier]

Health Policy and Planning

Volume 32, Issue 7 September 2017
<http://heapol.oxfordjournals.org/content/current>

Original Articles

[Drivers of health system strengthening: learning from implementation of maternal and child health programmes in Mozambique, Nepal and Rwanda](#)

[Fiona Samuels](#); [Ana B Amaya](#); [Dina Balabanova](#)

Abstract

There is a growing understanding that strong health systems are crucial to sustain progress. Health systems, however, are complex and much of their success depends on factors operating at different levels and outside the health system, including broader governance and political commitment to health and social development priorities. Recognizing these complexities, this article offers a pragmatic approach to exploring the drivers of progress in maternal and child health in Mozambique, Nepal and Rwanda. To do this, the article builds on a semi-systematic literature review and case study findings, designed and analysed using a multi-level framework. At the macro level, governance with effective and committed leaders was found to be vital for achieving positive health outcomes. This was underpinned by clear commitment from donors coupled by a significant increase in funding to the health sector. At the meso level, where policies are operationalized, inter-sectoral partnerships as well as decentralization and task-shifting emerged as critical. At micro (service interface) level, community-centred models and accessible and appropriately trained and incentivized local health providers play a central role in all study countries. The key drivers of progress are multiple, interrelated and transversal in terms of their operation; they are also in a constant state of flux as health systems and contexts develop. Without seeking to offer a blueprint, the study demonstrates that a 'whole-system' approach can help elicit the key drivers of change and potential pathways towards desirable outcomes. Furthermore, understanding the challenges and opportunities that are instrumental to progress at each particular level of a health system can help policy-makers and implementers to navigate this complexity and take action to strengthen health systems.

Health Research Policy and Systems

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

[Accessed 29 July 2017]

Research

[Increasing health policy and systems research capacity in low- and middle-income countries: results from a bibliometric analysis](#)

For 20 years, substantial effort has been devoted to catalyse health policy and systems research (HPSR) to support vulnerable populations and resource-constrained regions through increased funding, institutional capacity-building and knowledge production; yet, participation from low- and middle-income countries (LMICs) is underrepresented in HPSR knowledge production...

While the absolute number of publications remains low, lead authors from an LMIC have participated exponentially in the life and biomedical sciences (PubMed) since the early 2000s. HPSR publications with a topic relevant to LMICs and an LMIC lead author continue to increase at a greater rate than the life and biomedical science topics in general. This correlation is likely due to increased capacity for research within LMICs and the support for publications surrounding large HPSR initiatives. These findings provide strong evidence that continued support is key to the longevity and enhancement of HPSR toward its mandate.

Krista M. English and Babak Pourbohloul

Health Research Policy and Systems 2017 15:64

Published on: 28 July 2017

Humanitarian Exchange Magazine

<http://odihpn.org/magazine/the-humanitarian-consequences-of-violence-in-central-america/>

Number 69 June 2017

The humanitarian consequences of violence in Central America

[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

Volume 13, Issue 7, 2017

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

[Reviewed earlier]

Infectious Agents and Cancer

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

[Accessed 29 July 2017]

[No new digest content identified]

Infectious Diseases of Poverty

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

[Accessed 29 July 2017]

[No new digest content identified]

International Health

Volume 9, Issue 3 May 2017

<http://inthehealth.oxfordjournals.org/content/current>
[Reviewed earlier]

International Journal of Community Medicine and Public Health

Vol 4, No 7 (2017) July 2017

<http://www.ijcmph.com/index.php/ijcmph/issue/view/26>

[Reviewed earlier]

International Journal of Epidemiology

Volume 46, Issue 2 April 2017

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

[Reviewed earlier]

International Journal of Human Rights in Healthcare

Vol. 10 Issue: 3

<http://www.emeraldinsight.com/toc/ijhrh/10/3>

[New issue; No digest content identified]

International Journal of Infectious Diseases

July 2017 Volume 60, p1-102

[http://www.ijidonline.com/issue/S1201-9712\(17\)X0007-6](http://www.ijidonline.com/issue/S1201-9712(17)X0007-6)

[Reviewed earlier]

JAMA

July 25, 2017, Vol 318, No. 4, Pages 313-400

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

Research Letter

[Association of the Priority Review Voucher With Neglected Tropical Disease Drug and Vaccine Development](#)

Nina Jain, MD, MSc; Thomas Hwang, AB; Jessica M. Franklin, PhD; et al.

JAMA. 2017;318(4):388-389. doi:10.1001/jama.2017.7467

Congress created the priority review voucher in 2007 to incentivize the development of treatments for neglected tropical diseases. Vouchers, which can be transferred or sold, are awarded when a company obtains US Food and Drug Administration (FDA) approval for a drug or vaccine indicated for a neglected tropical disease ([Box](#)). They allow sponsors to obtain faster FDA review of a product for any indication, not restricted to neglected tropical diseases, moving the application from the standard 10 months to the priority review timeline of 6 months. This provides valuable earlier access to the US market for those drugs that would have not otherwise qualified for priority review: vouchers have been sold for prices ranging from \$67 million to \$350 million.²

JAMA Pediatrics

July 2017, Vol 171, No. 7, Pages 611-716
<http://archpedi.jamanetwork.com/issue.aspx>
[Reviewed earlier]

JBI Database of Systematic Review and Implementation Reports

July 2017 - Volume 15 - Issue 7
<http://journals.lww.com/jbisrir/Pages/currenttoc.aspx>
[Reviewed earlier]

Journal of Community Health

Volume 42, Issue 4, August 2017
<http://link.springer.com/journal/10900/42/3/page/1>
[Reviewed earlier]

Journal of Epidemiology & Community Health

August 2017 - Volume 71 - 8
<http://jech.bmj.com/content/current>
Reviews

[Return on investment of public health interventions: a systematic review](#)

Rebecca Masters, Elspeth Anwar, Brendan Collins, Richard Cookson, Simon Capewell

Abstract

Background Public sector austerity measures in many high-income countries mean that public health budgets are reducing year on year. To help inform the potential impact of these proposed disinvestments in public health, we set out to determine the return on investment (ROI) from a range of existing public health interventions.

Methods We conducted systematic searches on all relevant databases (including MEDLINE; EMBASE; CINAHL; AMED; PubMed, Cochrane and Scopus) to identify studies that calculated a ROI or cost-benefit ratio (CBR) for public health interventions in high-income countries.

Results We identified 2957 titles, and included 52 studies. The median ROI for public health interventions was 14.3 to 1, and median CBR was 8.3. The median ROI for all 29 local public health interventions was 4.1 to 1, and median CBR was 10.3. Even larger benefits were reported in 28 studies analysing nationwide public health interventions; the median ROI was 27.2, and median CBR was 17.5.

Conclusions This systematic review suggests that local and national public health interventions are highly cost-saving. Cuts to public health budgets in high income countries therefore represent a false economy, and are likely to generate billions of pounds of additional costs to health services and the wider economy.

Journal of Global Ethics

Volume 13, Issue 1, 2016
<http://www.tandfonline.com/toc/rjge20/current>
[Reviewed earlier]

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

Volume 28, Number 2 Supplement, May 2017

<https://muse.jhu.edu/issue/36192>

The Power of Prevention: Reaching At-Risk Emerging Adults to Reduce Substance Abuse and HIV

Guest Editors: Lorece Edwards, DrPH, MHS, Morgan State University and Ronald L. Braithwaite, PhD, Morehouse School of Medicine

[Reviewed earlier]

Journal of Immigrant and Minority Health

Volume 19, Issue 4, August 2017

<https://link.springer.com/journal/10903/19/4/page/1>

[Reviewed earlier]

Journal of Immigrant & Refugee Studies

Volume 15, Issue 2, 2017

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

Special Issue: Human Trafficking in Domestic Work: A Special Case or a Learning Ground for the Anti-Trafficking Field?

[Articles focused on Netherlands, Britain, Italy, Greece, France]

[Reviewed earlier]

Journal of Infectious Diseases

Volume 215, Issue 12 1 July 2017

<https://academic.oup.com/jid/issue>

Polio Endgame & Legacy-Implementation, Best Practices, and Lessons Learned

[Reviewed earlier]

Journal of Medical Ethics

August 2017 - Volume 43 - 8

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

[New issue; No digest content identified]

Journal of Medical Internet Research

Vol 19, No 7 (2017): July

<http://www.jmir.org/2017/7>

[Reviewed earlier]

Journal of Medical Microbiology

Volume 66, Issue 6, June 2017

<http://jmm.microbiologyresearch.org/content/journal/jmm/66/6>

[Reviewed earlier]

Journal of Patient-Centered Research and Reviews

Volume 4, Issue 2 (2017)

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

[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 6, Issue 2 1 June 2017

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

[Reviewed earlier]

Journal of Pediatrics

August 2017 Volume 187, p1-340

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

Original Articles

First Trimester Influenza Vaccination and Risks for Major Structural Birth Defects in Offspring

Elyse Olshen Kharbanda, Gabriela Vazquez-Benitez, Paul A. Romitti, Allison L. Naleway, T. Craig Cheetham, Heather S. Lipkind, Nicola P. Klein, Grace Lee, Michael L. Jackson, Simon J.

Hambidge, Natalie McCarthy, Frank DeStefano, James D. Nordin for the Vaccine Safety Datalink p234–239.e4

Published online: May 24, 2017

Abstract

Objective

To examine risks for major structural birth defects in infants after first trimester inactivated influenza vaccine (IIV) exposures.

Study design

In this observational study, we used electronic health data from 7 Vaccine Safety Datalink sites to examine risks for selected major structural defects in infants after maternal IIV exposure. Vaccine exposures for women with continuous insurance enrollment through pregnancy who delivered singleton live births between 2004 and 2013 were identified from standardized files. Infants with continuous insurance enrollment were followed to 1 year of age. We excluded mother–infant pairs with other exposures that potentially increased their background risk for birth defects. Selected cardiac, orofacial or respiratory, neurologic, ophthalmologic or otologic, gastrointestinal, genitourinary and muscular or limb defects were identified from diagnostic codes in infant medical records using validated algorithms. Propensity score adjusted generalized estimating equations were used to estimate prevalence ratios (PRs).

Results

We identified 52 856 infants with maternal first trimester IIV exposure and 373 088 infants whose mothers were unexposed to IIV during first trimester. Prevalence (per 100 live births) for selected major structural birth defects was 1.6 among first trimester IIV exposed versus 1.5 among unexposed mothers. The adjusted PR was 1.02 (95% CI 0.94-1.10). Organ system-specific PRs were similar to the overall PR.

Conclusion

First trimester maternal HIV exposure was not associated with an increased risk for selected major structural birth defects in this large cohort of singleton live births.

Journal of Public Health Management & Practice

July/August 2017 - Volume 23 - Issue 4

<http://journals.lww.com/jphmp/pages/default.aspx>

[Reviewed earlier]

Journal of Public Health Policy

Volume 38, Issue 2, May 2017

<https://link.springer.com/journal/41271/38/2/page/1>

[Reviewed earlier]

Journal of the Royal Society – Interface

01 July 2017; volume 14, issue 132

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

[Reviewed earlier]

Journal of Travel Medicine

Volume 24, Issue 4, July-August 2017

<https://academic.oup.com/jtm/issue/24/4>

[Reviewed earlier]

Journal of Virology

August 2017, volume 91, issue 15

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

[Reviewed earlier]

The Lancet

Jul 29, 2017 Volume 390 Number 10093 p429-530

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

Series

Evolutionary public health

[Evolutionary public health: introducing the concept](#)

Jonathan C K Wells, Randolph M Nesse, Rebecca Sear, Rufus A Johnstone, Stephen C Stearns

Summary

The emerging discipline of evolutionary medicine is breaking new ground in understanding why people become ill. However, the value of evolutionary analyses of human physiology and behaviour is only beginning to be recognised in the field of public health. Core principles come from life history theory, which analyses the allocation of finite amounts of energy between four competing functions—maintenance, growth, reproduction, and defence. A central tenet of evolutionary theory is that organisms are selected to allocate energy and time to maximise

reproductive success, rather than health or longevity. Ecological interactions that influence mortality risk, nutrient availability, and pathogen burden shape energy allocation strategies throughout the life course, thereby affecting diverse health outcomes. Public health interventions could improve their own effectiveness by incorporating an evolutionary perspective. In particular, evolutionary approaches offer new opportunities to address the complex challenges of global health, in which populations are differentially exposed to the metabolic consequences of poverty, high fertility, infectious diseases, and rapid changes in nutrition and lifestyle. The effect of specific interventions is predicted to depend on broader factors shaping life expectancy. Among the important tools in this approach are mathematical models, which can explore probable benefits and limitations of interventions *in silico*, before their implementation in human populations.

Lancet Global Health

Aug 2017 Volume 5 Number 8 e727-e837

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

Editorial

Collaborating to ease Africa's data drought

The Lancet Global Health

At the High-Level Political Forum on Sustainable Development in New York this week, UN Member States have been taking a detailed look at progress on a selection of the Sustainable Development Goals (SDGs), including goal 3 on ensuring healthy lives. As part of this process, 44 countries from across the wealth spectrum have provided voluntary national reviews, including seven from Africa. These African reviews reveal a dedication to the SDG process, with incorporation of targets into national plans and efforts to engage all stakeholders via consultations and awareness campaigns. However, there is a recurring theme when it comes to challenges. Aside from the obvious financial limitations, almost all countries cite a dearth of reliable disaggregated data on which to base intervention programmes....

Articles

Global funding trends for malaria research in sub-Saharan Africa: a systematic analysis

Michael G Head, Sian Goss, Yann Gelister, Victor Alegana, Rebecca J Brown, Stuart C Clarke, Joseph R A Fitchett, Rifat Atun, J Anthony G Scott, Marie-Louise Newell, Sabu S Padmadas, Andrew J Tatem

Summary

Background

Total domestic and international funding for malaria is inadequate to achieve WHO global targets in burden reduction by 2030. We describe the trends of investments in malaria-related research in sub-Saharan Africa and compare investment with national disease burden to identify areas of funding strength and potentially neglected populations. We also considered funding for malaria control.

Methods

Research funding data related to malaria for 1997–2013 were sourced from existing datasets, from 13 major public and philanthropic global health funders, and from funding databases. Investments (reported in US\$) were considered by geographical area and compared with data on parasite prevalence and populations at risk in sub-Saharan Africa. 45 sub-Saharan African countries were ranked by amount of research funding received.

Findings

We found 333 research awards totalling US\$814.4 million. Public health research covered \$308.1 million (37.8%) and clinical trials covered \$275.2 million (33.8%). Tanzania (\$107.8 million [13.2%]), Uganda (\$97.9 million [12.0%]), and Kenya (\$92.9 million [11.4%]) received the highest sum of research investment and the most research awards. Malawi, Tanzania, and Uganda remained highly ranked after adjusting for national gross domestic product. Countries with a reasonably high malaria burden that received little research investment or funding for malaria control included Central African Republic (ranked 40th) and Sierra Leone (ranked 35th). Congo (Brazzaville) and Guinea had reasonably high malaria mortality, yet Congo (Brazzaville) ranked 38th and Guinea ranked 25th, thus receiving little investment.

Interpretation

Some countries receive reasonably large investments in malaria-related research (Tanzania, Kenya, Uganda), whereas others receive little or no investments (Sierra Leone, Central African Republic). Research investments are typically highest in countries where funding for malaria control is also high. Investment strategies should consider more equitable research and operational investments across countries to include currently neglected and susceptible populations.

Funding

Royal Society of Tropical Medicine and Hygiene and Bill & Melinda Gates Foundation.

Lancet Infectious Diseases

Aug 2017 Volume 17 Number 8 p781-882 e235-e279

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

Editorial

Cholera in Yemen: war, hunger, disease...and heroics

The Lancet Infectious Diseases

Summary

The harms done by war are many and complex. Death, injury, and displacement are the most obvious, but infection is also closely intertwined with conflict. Across the Middle East and Africa, outbreaks of infection have occurred as a direct effect of war, compounded by food and water shortages, displacement, and damage to infrastructure and health services. Nowhere is this web of interconnections more clear than in the cholera epidemic in Yemen.

Comment

Advances in Ebola virus vaccination

Elizabeth C Clarke, Steven B Bradfute

The Ebola virus outbreak in western Africa between 2013 and 2016 was the largest and deadliest since the discovery of the virus in 1976. The epidemic provided the impetus to fast-track several promising vaccines into clinical trials during the tail-end of the outbreak, including the rVSVΔG-ZEBOV-GP viral vector vaccine, which was used in ring vaccination trials in Guinea.¹ In The Lancet Infectious Diseases, D Gray Heppner and colleagues² report on the safety and immunogenicity of the rVSVΔG-ZEBOV-GP vaccine over a 6 log₁₀ dose range. This study shows vaccine dose-dependent total and neutralising antibody titres among study participants, which persisted for up to 360 days. The rVSVΔG-ZEBOV-GP vaccine used in the study is a recombinant, replication-competent vaccine based on vesicular stomatitis virus in which the vesicular stomatitis virus glycoprotein (G) has been replaced with the Zaire Ebola virus surface glycoprotein (GP). The Ebola virus surface glycoprotein is the main antigen used in Ebola

vaccine development, with the chimpanzee adenovirus (ChAd3)-based vaccine also expressing Ebola virus glycoprotein.³

The strength of this study lies in its demonstration of the longevity of neutralising antibody responses after vaccination. Previous studies with this vaccine showed sharp drop-offs in antibody titres after several months,^{4, 5} but in this study Ebola virus glycoprotein-specific antibodies were maintained for up to 360 days. Good longevity of immune responses is particularly positive for future development of Ebola virus vaccines, since it could increase the utility of the vaccine for health-care workers and people in endemic regions who are most likely to be exposed to the virus over a prolonged period.

This study examined a range of vaccine doses for immunogenicity. Although lower doses of the vaccine did develop neutralising antibody titres, the authors show that these responses were lower and emerged more slowly than with higher doses of the vaccine. These data are important because the rapidity of the development of immunity could have important repercussions on the value of the vaccine in an outbreak setting, where exposure to the virus is high and decreased time to onset of protection is essential.

Concerns have been raised previously regarding the safety profile of the rVSVΔG-ZEBOV-GP vaccine, particularly the high rates of post-vaccination arthralgia, which were reported in the phase 1 VSV-Ebola Consortium (VEBCON) network vaccine study in Geneva, Switzerland.⁶ As with other live attenuated vector-based vaccines, adverse events in this study were more common at higher vaccine doses than at lower doses. This study also addresses many safety concerns, showing that the vaccine was well tolerated and that adverse events of transient arthritis were observed at a much lower rate than in some previous Ebola vaccine studies. The correlates of protection for Ebola virus are currently unclear. Historically, different vaccine studies have shown that either robust virus-specific CD8+ T-cell responses, high antibody titres, or both are necessary for protection.^{7, 8, 9, 10} It is possible that correlates of protection for Ebola virus are different for each vaccine,¹¹ or that variations in methodology for complex assays produce different outcomes.

The authors used IgG ELISA and neutralising antibody titres to assess the relevant immunogenicity of the vaccine. Antibodies are thought to be the necessary correlate of protection for the rVSVΔG-ZEBOV-GP vaccine, on the basis of results in non-human primate studies.⁸ However, it is unknown how well correlates of protection in non-human primates apply to human beings. Additionally, multiple methods can be used for assessment of antibody neutralisation and titre, and the absence of standard assays introduces uncertainty into comparisons of different vaccine platforms and clinical trials.

The prolonged antibody responses and increased understanding of the optimal vaccine doses shown in this study are important steps towards creating a safe and efficacious vaccine against Ebola virus disease. Future work should further describe the onset of protection after Ebola virus vaccination and characterise antibody isotype make-up and T-cell responses. We believe that efforts should be made to standardise the T-cell and antibody assays used in Ebola vaccine trials so that comparisons can be made between vaccines and the vaccines themselves can be improved upon.

Articles

[Safety and immunogenicity of a live attenuated influenza H5 candidate vaccine strain A/17/turkey/Turkey/05/133 H5N2 and its priming effects for potential pre-pandemic use: a randomised, double-blind, placebo-controlled trial](#)

Punnee Pitisuttithum, Kobporn Boonnak, Supat Chamnanchanunt, Pilaipan Puthavathana, Viravarn Luvira, Hatairat Lerdsamran, Jaranit Kaewkungwal, Saranath Lawpoolsri, Vipa Thanachartwet, Udomsak Silachamroon, Wanibtisam Masamae, Alexandra Schuetz, Ponthip Wirachwong, Sit Thirapakpoomanunt, Larisa Rudenko, Erin Sparrow, Martin Friede, Marie-Paule Kiény

[Safety and immunogenicity of a parenteral P2-VP8-P\[8\] subunit rotavirus vaccine in toddlers and infants in South Africa: a randomised, double-blind, placebo-controlled trial](#)

Michelle J Groome, Anthonet Koen, Alan Fix, Nicola Page, Lisa Jose, Shabir A Madhi, Monica McNeal, Len Dally, Iksung Cho, Maureen Power, Jorge Flores, Stanley Cryz

[Safety and immunogenicity of the rVSVAG-ZEBOV-GP Ebola virus vaccine candidate in healthy adults: a phase 1b randomised, multicentre, double-blind, placebo-controlled, dose-response study](#)

D Gray Heppner Jr, Tracy L Kemp, Brian K Martin, William J Ramsey, Richard Nichols, Emily J Dasen, Charles J Link, Rituparna Das, Zhi Jin Xu, Eric A Sheldon, Teresa A Nowak, Thomas P Monath for the V920-004 study team

[Impact of MenAfriVac in nine countries of the African meningitis belt, 2010–15: an analysis of surveillance data](#)

Caroline L Trotter, Clément Lingani, Katya Fernandez, Laura V Cooper, André Bitá, Carol Tevi-Benissan, Olivier Ronveaux, Marie-Pierre Préziosi, James M Stuart

[Global burden of disease of HIV-associated cryptococcal meningitis: an updated analysis](#)

Radha Rajasingham, Rachel M Smith, Benjamin J Park, Joseph N Jarvis, Nelesh P Govender, Tom M Chiller, David W Denning, Angela Loyse, David R Boulware

Lancet Public Health

Jul 2017 Volume 2 Number 7 e297-e340

<http://thelancet.com/journals/lanpub/>

[Reviewed earlier]

Lancet Respiratory Medicine

Jul 2017 Volume 5 Number 7 p535-598 e23-e26

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

[Reviewed earlier]

Maternal and Child Health Journal

Volume 21, Issue 7, July 2017

<https://link.springer.com/journal/10995/21/7/page/1>

[Reviewed earlier]

Medical Decision Making (MDM)

Volume 37, Issue 5, July 2017

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

[Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy

June 2017 Volume 95, Issue 2 Pages 213–446

<http://onlinelibrary.wiley.com/doi/10.1111/milq.2017.95.issue-2/issuetoc>

[Reviewed earlier]

Nature

Volume 547 Number 7664 pp379-486 27 July 2017

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

[New issue: No digest content identified]

Nature Medicine

July 2017, Volume 23 No 7 pp789-898

<http://www.nature.com/nm/journal/v23/n7/index.html>

[Reviewed earlier]

Nature Reviews Immunology

July 2017 Vol 17 No 7

<http://www.nature.com/nri/journal/v17/n7/index.html>

[Reviewed earlier]

New England Journal of Medicine

July 27, 2017 Vol. 377 No. 4

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

[New issue: No digest content identified]

Pediatrics

July 2017, VOLUME 140 / ISSUE 1

<http://pediatrics.aappublications.org/content/139/6?current-issue=y>

[Reviewed earlier]

Pharmaceutics

Volume 9, Issue 2 (June 2017)

<http://www.mdpi.com/1999-4923/9/2>

[Reviewed earlier]

Pharmacoeconomics

Volume 35, Issue 7, July 2017

<https://link.springer.com/journal/40273/35/7/page/1>

[Reviewed earlier]

PLOS Currents: Disasters

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

[Accessed 29 July 2017]

[No new digest content identified]

PLoS Currents: Outbreaks

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

[Accessed 29 July 2017]

[No new digest content identified]

PLoS Medicine

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

(Accessed 29 July 2017)

[No new digest content identified]

PLoS Neglected Tropical Diseases

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

(Accessed 29 July 2017)

Research Article

Participation of women and children in hunting activities in Sierra Leone and implications for control of zoonotic infections

Jesse Bonwitt, Martin Kandeh, Michael Dawson, Rashid Ansumana, Foday Sahr, Ann H. Kelly, Hannah Brown

| published 27 Jul 2017 PLOS Neglected Tropical Diseases

<https://doi.org/10.1371/journal.pntd.0005699>

Abstract

The emergence of infectious diseases of zoonotic origin highlights the need to understand social practices at the animal-human interface. This study provides a qualitative account of interactions between humans and wild animals in predominantly Mende villages of southern Sierra Leone. We conducted fieldwork over 4 months including participant and direct observations, semi-structured interviews (n=47), spontaneously occurring focus group discussions (n=12), school essays and informal interviews to describe behaviours that may serve as pathways for zoonotic infection. In this region, hunting is the primary form of contact with wild animals. We describe how these interactions are shaped by socio-cultural contexts, including opportunities to access economic resources and by social obligations and constraints.

Our research suggests that the potential for exposure to zoonotic pathogens is more widely distributed across different age, gender and social groups than previously appreciated. We highlight the role of children in hunting, an age group that has previously not been discussed in the context of hunting. The breadth of the "at risk" population forces reconsideration of how we conceptualize, trace and monitor pathogen exposure.

Author summary

Studying how and why humans interact with animals is important to understand the transmission of zoonotic diseases (infectious diseases transmitted from animals to humans) and how to prevent and control them. We conducted a qualitative study to understand how and why people come into contact with wild animals in the Southern province of Sierra Leone, a region with numerous wildlife species known to carry zoonotic diseases. Previous studies on hunting in sub-Saharan Africa principally describe adult men as hunters and adult women as retailers of meat from wild animals. Based on our results, we seek to broaden the category of people deemed "at risk" of zoonotic diseases through hunting by including women and children. In particular, because of their limited physical abilities and social position, children hunt under different circumstances than those of adults. Our results have implications for zoonotic disease research and prevention, for example by ensuring children are integrated in health interventions and that their unique reasons to hunt are taken into account during such processes.

PLoS One

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

[Accessed 29 July 2017]

Research Article

[Using actor-partner interdependence modeling to understand HPV vaccine acceptance](#)

Laura E. VanderDrift, Peter A. Vanable, Katherine E. Bonafide, Jennifer L. Brown, Rebecca A. Bostwick, Michael P. Carey

| published 27 Jul 2017 PLOS ONE

<https://doi.org/10.1371/journal.pone.0181662>

[Coverage and factors associated with influenza vaccination among kindergarten children 2-7 years old in a low-income city of north-western China \(2014-2016\)](#)

Lili Xu, Ying Qin, Juan Yang, Wei Han, Youju Lei, Huaxiang Feng, Xiaoyun Zhu, Yanming Li, Hongjie Yu, Luzhao Feng, Yan Shi

Research Article | published 27 Jul 2017 PLOS ONE

<https://doi.org/10.1371/journal.pone.0181539>

[Adolescent values for immunisation programs in Australia: A discrete choice experiment](#)

Bing Wang, Gang Chen, Julie Ratcliffe, Hossein Haji Ali Afzali, Lynne Giles, Helen Marshall

Research Article | published 26 Jul 2017 PLOS ONE

<https://doi.org/10.1371/journal.pone.0181073>

PLoS Pathogens

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

[Accessed 29 July 2017]

[No new digest content identified]

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

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

[Accessed 29 July 2017]

[No new digest content identified]

Prehospital & Disaster Medicine

Volume 32 - Issue 4 - August 2017

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

[New issue; No digest content identified]

Preventive Medicine

Volume 100, Pages 1-298 (July 2017)

<http://www.sciencedirect.com/science/journal/00917435/100?sd=1>

[Reviewed earlier]

Proceedings of the Royal Society B

17 May 2017; volume 284, issue 1854

<http://rspb.royalsocietypublishing.org/content/284/1854?current-issue=y>

[Reviewed earlier]

Public Health Ethics

Volume 10, Issue 2 July 2017

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

Symposium on Daniel Hausman's Valuing Health: Well-Being, Freedom and Suffering

[Reviewed earlier]

Public Health Reports

Volume 132, Issue 4, July/August 2017

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

[Reviewed earlier]

Qualitative Health Research

Volume 27, Issue 10, August 2017

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

Special Issue: Women's Health

[Reviewed earlier]

Reproductive Health

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

[Accessed 29 July 2017]

[No new digest content identified]

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

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

[No new digest content identified]

Risk Analysis

June 2017 Volume 37, Issue 6 Pages 1039–1207

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2017.37.issue-5/issuetoc>

Special Issue: Modeling Measles and Rubella Risks, Part II

[Reviewed earlier]

Risk Management and Healthcare Policy

Volume 10, 2017

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

[Reviewed earlier]

Science

28 July 2017 Vol 357, Issue 6349

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

Editorial

We still need to beat HIV

By François Dabis, Linda-Gail Bekker

Science 28 Jul 2017 : 33

Summary

Despite remarkable advances in HIV treatment and prevention, the limited political will and leadership in many countries—particularly in West and Central Africa and Eastern Europe—have fallen short of translating these gains into action. As a result, nearly 2 million infections occurred in 2016, creating a situation that is challenging to counter. This week in Paris, the International AIDS Society (IAS) convened researchers, health experts, and policy-makers to discuss the global state of this epidemic. It has been more than three decades since AIDS was clinically observed and associated with HIV infection. Since then, HIV has accounted for 35 million deaths worldwide. Today, about 37 million people are infected. IAS and the French Research Agency on HIV and Viral Hepatitis (ANRS) have now released the Paris Statement (www.ias2017.org/The-Paris-Statement-HIV-Science-Matters) to remind world leaders why HIV science matters, how it should be strengthened, and why it should be funded globally and durably so that new evidence can be translated into policy.

Science Translational Medicine

26 July 2017 Vol 9, Issue 400

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

[New issue; No digest content identified]

Social Science & Medicine

Volume 180, Pages 1-196 (May 2017)

<http://www.sciencedirect.com/science/journal/02779536/180>

[Reviewed earlier]

Travel Medicine and Infectious Diseases

May-June, 2017 Volume 17

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

[Reviewed earlier]

Tropical Medicine & International Health

July 2017 Volume 22, Issue 7 Pages 783–916

<http://onlinelibrary.wiley.com/doi/10.1111/tmi.2017.22.issue-7/issuetoc>

[Reviewed earlier]

Vaccine

Volume 35, Issue 34, Pages 4295-4450 (3 August 2017)

<http://www.sciencedirect.com/science/journal/0264410X/35/34?sd=1>

[Reviewed earlier]

Vaccine: Development and Therapy

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

(Accessed 29 July 2017)

[No new content]

Vaccines — Open Access Journal

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

(Accessed 29 July 2017)

[No new digest content identified]

Value in Health

July–August 2017 Volume 20, Issue 7, p837-1002

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

[Reviewed earlier]

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

No new digest content identified.

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Media/Policy Watch

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

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

The Atlantic

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

Accessed 29 July 2017

[No new, unique, relevant content]

BBC

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

Accessed 29 July 2017

[No new, unique, relevant content]

The Economist

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

Accessed 29 July 2017

[No new, unique, relevant content]

Financial Times

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

[No new, unique, relevant content]

Forbes

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

Accessed 29 July 2017

[The HPV Vaccine Saves Lives, So Why Aren't More Kids Getting It?](#)

David DiSalvo, Contributor
24 July 2017

The HPV vaccine is safe, effective, and it saves lives—so why are so few children getting vaccinated?

Foreign Affairs

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

Accessed 29 July 2017

[No new, unique, relevant content]

Foreign Policy

<http://foreignpolicy.com/>

Accessed 29 July 2017

The Next AIDS Pandemic

Laurie Garrett | July 26, 2017

Funding cuts to key U.S. programs that support medicine and treatment are coming. And with a booming African population and drug-resistant strains on the rise, the future is grim.

The Guardian

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

Accessed 29 July 2017

[No new, unique, relevant content]

New Yorker

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

Accessed 29 July 2017

[No new, unique, relevant content]

New York Times

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

Italy Approves Hotly Contested Mandatory Vaccine Program

Italy's parliament on Friday gave final approval to making a slate of childhood vaccinations mandatory for school children up to age 16, a move aimed at countering an anti-vaccine trend that officials have attributed to misinformation.

July 28, 2017 - By THE ASSOCIATED PRESS

Whooping Cough Cases Double in Indiana in a Year, Prompting a Call to Vaccinate

There were 136 confirmed cases of whooping cough in the state in the first half of 2017, compared with 66 in the first half of 2016, but an expert was not alarmed.

July 27, 2017 - By MAGGIE ASTOR

Romania to Pass Vaccination Law to Deal With Immunisation Gaps

Romania needs to pass a vaccination law and overhaul medical services to prevent the spread of a measles outbreak that has already claimed 32 deaths, the most of any European country, the health ministry said late on Wednesday.

July 27, 2017 - By REUTERS –

Yemen Cholera Epidemic Slowing After Infecting 400,000

Yemen's cholera outbreak is set to hit 400,000 cases on Tuesday but there are signs the three-month-old epidemic is slowing, according to World Health Organization data analyzed by Reuters.

July 25, 2017 - By REUTERS –

[The Drug Maker Sanofi's New Dengue Vaccine](#)

Sanofi takes issue with a claim that Big Pharma ignores sickness in developing countries.

July 24, 2017 - - Opinion

['No Jab, No Play': How Australia Is Handling the Vaccination Debate](#)

States are moving to punish child care centers that enroll the unvaccinated, dismissing the objections of those who resist immunization without a valid medical reason.

July 24, 2017 - By ADAM BAIDAWI

Wall Street Journal

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

Accessed 29 July 2017

[No new, unique, relevant content]

Washington Post

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

Accessed 29 July 2017

[No new, unique, relevant content]

[Think Tanks et al](#)

Brookings

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

Accessed 29 July 2017

TechTank

[How the Trump budget harms global health and weakens international stability](#)

Jake Schneider and Darrell M. West

Thursday, July 27, 2017

Center for Global Development

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

Accessed 29 July 2017

[No new relevant content]

Council on Foreign Relations

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

Accessed 29 July 2017

[No new relevant content]

CSIS

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

Accessed 29 July 2017

[No new relevant content]

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

Support for this service is provided by the Bill & Melinda Gates Foundation; Aeras; IAVI; PATH; the International Vaccine Institute (IVI); and industry resource members Janssen/J&J, Pfizer, PRA Health Sciences, Sanofi Pasteur U.S., Takeda, Valera (list in formation), and the Developing Countries Vaccine Manufacturers Network (DCVMN).

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

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