Vaccines and Global Health: The Week in Review
7 April 2018
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.*

Comments and suggestions should be directed to
David R. Curry, MS
Editor and
Executive Director
Center for Vaccine Ethics & Policy
david.r.curry@centerforvaccineethicsandpolicy.org

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

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

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

Milestones :: Perspectives

WHO at 70 - working for better health for everyone, everywhere

5 April 2018 – On 7 April, World Health Day, the World Health Organization marks its 70th anniversary. This year, World Health Day is dedicated to one of WHO's founding principles: "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."…

A renewed commitment to prevent outbreaks from turning into epidemics, and to respond better and faster to humanitarian emergencies, has spurred the creation of a new health emergencies programme that works across all three levels of the Organization. WHO is currently responding to outbreaks and humanitarian crises in more than 40 countries.

Next month, at the World Health Assembly, the Organization will propose a bold new agenda that builds on lessons learnt and experience gained over the past 70 years. It will focus on achieving universal health coverage for 1 billion more people; protecting 1 billion more people from health emergencies and enabling 1 billion more people to enjoy better health and wellbeing – by 2023, the halfway point to the 2030 Sustainable Development Agenda deadline.

Historical details

WHO succeeded the League of Nations' Health Organization. Its establishment was approved by the UN Conference in San Francisco, USA in 1945. The WHO Constitution was drafted by a committee, chaired by Dr Brock Chisholm, who became WHO's first Director-General in 1948. The Constitution was approved by Member States during the International Health Conference in New York, USA.

::::::
::::::

Featured Journal Content

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 7 April 2018)
Viewpoints
Safeguarding against Ebola: Vaccines and therapeutics to be stockpiled for future outbreaks
Eric M. Espeland, Chia-Wei Tsai, Joseph Larsen, Gary L. Disbrow
| published 05 Apr 2018 PLOS Neglected Tropical Diseases
https://doi.org/10.1371/journal.pntd.0006275
The Ebola virus outbreak of 2014 to 2016 had severe and devastating consequences for the people of West Africa, with more than 28,000 cases and 11,000 deaths across Liberia, Sierra Leone, and Guinea [1]. This epidemic exposed inadequacies in the medical countermeasure preparedness of international governments and organizations that limited their ability to effectively address the spread of the Ebola virus. Although Ebola virus had been circulating in Africa for decades with periodic outbreaks [1], funding for filoviruses has been limited to preclinical evaluation and establishment of assays and reagents that were necessary to quickly evaluate vaccine and therapeutic candidates. The few medical countermeasures that existed were stalled in early stages of development, a consequence of several factors, including

insufficient funding to advance candidates, an uncertain regulatory path for development, and constraints associated with Biosafety Level 4 containment suites for research using Ebola viruses [2, 3, 4]. As the West Africa Ebola epidemic grew in scale, governments, international organizations, nongovernment organizations, and industry scrambled to mount an effective response to contain the outbreak [5]. The United States government (USG) and others invested millions of dollars to accelerate the development of vaccine, therapeutic, and diagnostic candidates from early preclinical development into manufacturing scale-up and clinical trials [2]. Several of these clinical trials were conducted in West Africa, which offered the potential to have a direct impact on the ongoing outbreak and demonstrate clinical efficacy of the medical countermeasures. Ultimately, the early development of these medical countermeasures was led by collaborative efforts across multiple organizations and countries. For example, early development of both vaccines and therapeutics can be attributed to organizations such as the National Institutes of Allergy and Infectious Diseases (NIAID), the US Army Medical Research Institute of Infectious Diseases (USAMRIID), the Defense Threat Reduction Agency (DTRA), the Medical Countermeasure Systems-Joint Vaccine Acquisition Program (MCS-JVAP), and the Public Health Agency Canada (PHAC). During the international response to the outbreak, numerous organizations, institutions, and international governments contributed to the evaluation of these medical countermeasures in the field, including the Ministries of Health in Guinea and Liberia, the Ministry of Health and Sanitation in Sierra Leone, the World Health Organization (WHO), and the Wellcome Trust, United Kingdom, to name a few.

The Biomedical Advanced Research and Development Authority (BARDA), part of the US Department of Health and Human Services, is mandated to support advanced research and development (R&D) of medical countermeasures for chemical, biological, radiological, and nuclear (CBRN) agents—including Ebola—under the Pandemic and All-Hazards Preparedness Act (PAHPA) of 2006 [6] and its reauthorization (PAHPRA) in 2013 [7] and procurement through the Project Bioshield Act of 2004 [8]. BARDA employs a public–private partnership model, providing funding, programmatic, and regulatory technical support for the advanced development of promising medical countermeasures toward licensure. In response to the West Africa outbreak, BARDA supported the development of Ebola vaccines and therapeutics candidates, with emphasis on late-stage development activities and manufacturing current Good Manufacturing Practice (cGMP) products for use in clinical trials, if deemed appropriate. As a result, several lead therapeutic and vaccine candidates may be eligible for Food and Drug Administration (FDA) licensure in the near-term and, more importantly, will be available for use during future public heath emergencies caused by the Ebola virus. Recently, BARDA announced four awards under Project BioShield to support the remaining late-stage development activities necessary for FDA licensure and for procuring these vaccines and therapeutics for the Strategic National Stockpile [9]. Project BioShield funding will support any Phase IV clinical study commitment required by the FDA once these vaccine and therapeutics have been licensed. BARDA's continued support for the advanced development and procurement of these medical countermeasures will provide the USG with a robust response capability for Ebola virus, either through naturally emerging outbreaks or use as a bioweapon.

Vaccines

Prior to the 2014 Ebola outbreak, most data on Ebola vaccines had been derived from nonclinical efficacy studies in small animals or nonhuman primates; clinical evaluations were limited [10,11]. The response to the West Africa Ebola outbreak accelerated the clinical evaluation and development of several Ebola vaccine candidates. Two lead candidates funded

by BARDA—Merck's V920 (rVSVΔG-ZEBOV-GP) and Janssen Vaccines & Prevention B.V.'s Ad26-ZEBOV/MVA-BN-Filo prime-boost vaccine (which has also received funding from NIAID)—are nearing consideration for licensure. The V920 vaccine produces a rapid immune response that is sustained up to one year post vaccination [12]. Merck is pursuing FDA licensure through a traditional approval pathway that emphasizes clinical efficacy data generated from the ring vaccination study conducted in Guinea [13]. The Ad26-ZEBOV/MVA-BN-Filo prime-boost vaccine is safe and well tolerated, producing sustained immune responses up to one year post vaccination [14, 15]. Janssen Vaccines & Prevention B.V. is pursuing FDA licensure through an Animal Rule/Accelerated pathway that will require demonstration of clinical efficacy through the establishment of an immune correlate within a nonhuman primate animal model. Both the V920 and the Ad26-ZEBOV/MVA-BN-Filo prime-boost vaccine candidates have been, or are being, evaluated in multiple Phase I, II, and III clinical trials.

Therapeutics

ZMapp, an investigational drug in development by Mapp Biopharmaceutical, is a cocktail composed of 3 chimeric, monoclonal antibodies (mAbs) that target the Ebola virus glycoprotein (EBOV-GP). The efficacy of ZMapp was assessed in the PREVAIL II Phase I/II clinical trial in Guinea, Liberia, Sierra Leone, and the US during this outbreak. Although the predetermined statistical thresholds for success were not met due to limited enrollment during the final months of the outbreak, a trend towards efficacy was evident [16]. ZMapp is now widely considered to be a component of standard of care. As such, it was part of the response to the March 2016 Ebola flare-up that originated in the Nzérékoré prefecture in Guinea [17] and spread to Liberia, and the Zmapp drug was also available for use in the May 2017 outbreak in the Democratic Republic of the Congo. Mapp Biopharmaceutical, BARDA, and the FDA have partnered to make ZMapp available in the US, Liberia, Sierra Leone, and Guinea under an expanded access protocol to ensure continued availability to patients with Ebola virus disease.

REGN-3470-3471-3479, a fully human 3-mAb cocktail developed by Regeneron during the outbreak, targets EBOV-GP and is currently being evaluated in a Phase I clinical study (www.clinicaltrials.gov/ct2/show/NCT02777151). BARDA has collaborated with Regeneron since 2015 and provided funding for nonclinical studies, manufacturing, and a Phase I study. It is expected that REGN-3470-3471-3479 will further bolster the USG's capability to deploy immunotherapeutics in the event of a public health emergency.

Conclusion

While WHO declared the end of the West Africa Ebola epidemic in June 2016 [18], the 2017 outbreak in the Democratic Republic of Congo is a reminder that the Ebola virus will remain a security health threat. This outbreak highlights the need for improvements in the way we incentivize industry and coordinate domestic and international responses to make the necessary vaccines, diagnostics, and therapeutics to effectively respond to emerging and neglected tropical disease threats and other biothreats for which there may not be a commercial market. As the USG's advanced development organization for medical countermeasures, BARDA is positioned to contribute to larger global initiatives—such as WHO's R&D blue print (http://www.who.int/blueprint/about/en/) and efforts by the Center for Epidemic Preparedness Innovations (CEPI)—that address emerging and neglected tropical diseases when outbreaks of international concern arise. Coordination between these organizations, as well as other international stakeholders, is critical to ensure that appropriate resources and expertise are brought to bear during future outbreaks. In order to rapidly respond to novel threats, an

emphasis on platforms that are capable of rapidly screening, identifying, and manufacturing vaccine or therapeutic candidates is needed. To this end, BARDA continues to assess and evaluate potential platform technologies as part of its larger portfolio of products, including efforts to develop medical countermeasures against emerging infectious diseases such as Middle East Respiratory Syndrome (MERS) and Zika.

There are a number of challenges that must be overcome to ensure adequate preparedness for future Ebola outbreaks, including completing the remaining advanced development activities necessary for regulatory approval and subsequent stockpiling of these medical countermeasures for use during a public health emergency. BARDA remains committed to making available safe and effective, FDA-approved vaccines and therapeutics for Ebola public health emergencies. Despite the advancement of the aforementioned vaccines and therapeutics against Ebola, gaps remain in our overall preparedness posture against other filoviruses. As such, BARDA will be pursuing the development of vaccines and therapeutics against Sudan ebolavirus and Marburg virus to address this gap. While we acknowledge that much work remains to prepare for future filovirus outbreaks, the recently announced BARDA awards for vaccines and therapeutics against Ebola represent an important milestone in our preparedness and ongoing commitment to counter this health security threat.
[References at title link above]

::::::
::::::

The Lancet
Apr 07, 2018 Volume 391 Number 10128 p1331-1454
http://www.thelancet.com/journals/lancet/issue/current
Editorial
The collapse of the Venezuelan health system
The Lancet
When Hugo Chavez became Venezuela's new president in 1998, he promised to provide free health care to all and enshrined this right within Venezuela's new constitution, rewritten in 1999. Progress was rapid and initial results were promising: according to the World Bank, life expectancy at birth rose from 71·8 to 74·1 years for both genders and infant mortality fell from 26·7 to 14·6 deaths per 1000 live births between 1998 and 2013, the period of Chavez's rule. Success was recognised on the international stage and Venezuela achieved most of the UN's Millennium Development Goals set for 2010. This initial success came on a backdrop of high oil prices providing the necessary government funding for public health-care spending and food imports. At the same time, a strong relationship with Cuba saw an agreement in 2003 that, in exchange for low-cost oil, Cuba would provide doctors, medical training, and medical supplies free of charge to Venezuela.

However, when the oil price began to fall in 2008 and Chavez's revolutionary politics alienated foreign investors, the tide turned. The largest oil reserves in the world could not stave off economic collapse as lower demand for oil, excessive government spending, US sanctions, and price controls led to rocketing inflation and falling gross domestic product. The impact on the health-care system was exacerbated by exchange rate controls, which led to a shortage of the foreign currency needed to import equipment, food, and medicines.

Official government data are hard to come by. The last official report from the Venezuelan Ministry of Health was published in 2016 (Boletin Epidemiologico) and the then Health Minister, Antonieta Corporale, was rewarded by being sacked immediately thereafter by Nicolas Maduro, who has been leading the country since 2013 (Venezuela has had 17 different ministers of health in the past 20 years). The results of this report were highlighted in a Lancet World Report in August, 2017, which noted the untenable situation in Venezuela. This government report revealed a 65% increase in maternal mortality and a 30% increase in infant mortality, with 11 466 infants dying during 2016. It also revealed that while Venezuela had been the first country in the world to eliminate malaria in populated areas, this and other diseases such as diphtheria, which had previously been controlled, had returned in several outbreaks.

Health-care outcomes have continued to deteriorate rapidly. The Venezuelan Government has steadily reduced the share of its annual expenditure dedicated to public health-care spending from a high of 9·1% in 2010 to 5·8% in 2014. Medical supplies have been reported as going missing or getting embargoed and sitting in ports, with some media alleging corruption hindering distribution. Some of these are for treating heart disease and diabetes—the leading causes of death in Venezuela, according to WHO. As a result, patients have resorted to bringing their own surgical instruments, drugs, and food to hospital. In private practice, medical professionals charge in US dollars, which makes health care unaffordable to most of the population.

A recent national survey—Encuesta Nacional de Hospitales 2018 from the political opposition, the National Assembly, and the Venezuelan non-govermental organisation Médicos por la Salud—revealed that Venezuela's health crisis is worse than anticipated. The survey, conducted between March 1–10, 2018, assessed the performance of 104 public and 33 private hospitals in Venezuela. According to the figures, most laboratory services and hospital nutrition services are only available intermittently or are completely inoperative. Shortages of items such as basic medicines, catheters, surgical supplies, and infant formula are highlighted in the survey; 14% of intensive care units have been shut down because they are unable to operate and 79% of the facilities analysed have no water at all.

Venezuela's Government has allowed the country's infrastructure to crumble, with fatal consequences for ordinary Venezuelans. Without regular reports on basic health indicators, assessment of the impact of the crisis is difficult. However, the Encuesta Nacional de Hospitales 2018 survey shows a shocking decline in health-care performance and a failure of the system. Aware of this humanitarian crisis, as declared by the political opposition in 2017, worldwide humanitarian aid has been offered by multiple countries and the UN. Yet Venezuela's Government has refused this humanitarian aid, denying the existence of a crisis. It is time to end the abuse of power by the Venezuelan Government, and take immediate steps to address the heavy toll on the wellbeing of Venezuelans.

::::::
::::::

Yemen

Yemen High-Level Pledging Event

Dr Tedros Adhanom Ghebreyesus
Director-General of the World Health Organization
Geneva, Switzerland
3 April 2018

Excellencies, distinguished guests, ladies and gentlemen,

As we have heard from many speakers today, three years of war in Yemen have led to the world's largest humanitarian crisis and one of its most severe food crises. It has also resulted in the world's largest cholera epidemic, a major diphtheria outbreak, and the virtual collapse of the nation's health system.

WHO estimates that only half of Yemen's health facilities remain fully functional. Health workers have not been paid regularly since September 2016 and many facilities are severely understaffed as a result.

WHO and other Health Cluster partners are increasingly being asked to fill gaps created by the collapsing health institutions, including paying salaries, procuring medical supplies, and providing essential health services to millions of Yemenis.

This year, the Health Cluster aims to reach 12.3 million people with life-saving health services. To do this, health actors together require 572 million U.S. dollars. We thank the many donors who have generously supported the health sector during 2017. And we count on your sustained and generous support for the foreseeable future.

In addition to the ongoing violence, political constraints are limiting the payment of health workers, obstructing humanitarian projects, and delaying the delivery of urgently-needed supplies.

The logistical capacities of WHO and partners are being challenged as supplies cannot reach Yemen fast enough. When they do arrive, all of us face obstacles in distributing them to those who need them most. Life-saving vaccination campaigns stop and start due to politics.

People are dying due to political dithering and red tape. If we cannot stop the fighting, we must at least find ways to address the political obstacles to the delivery of life-saving services. The Yemeni people need not only the financial support of our donor countries, they need your political support and advocacy to address these challenges.

Moreover, neither a traditional humanitarian nor a classic developmental response on their own will be enough to stem the suffering. We have to employ a new way of working – a common strategy that involves all actors in addressing acute emergency needs and, at the same time, strengthening the resilience of Yemeni institutions and society.

One of the recurring themes of today's conference is that there is no humanitarian answer to the crisis in Yemen and that, ultimately, only peace will stop the suffering. Parties on both sides of the conflict must have the courage and the solidarity with the Yemeni people to arrive at a political resolution. Concrete steps must be taken for peace, and ensuring unhindered access to health care can be one of the key stepping stones in that process.

Thank you.

::::::
::::::

Emergencies

POLIO

Public Health Emergency of International Concern (PHEIC)
Polio this week as of 3 April 2018 [GPEI]
Summary of newly-reported viruses this week:
Afghanistan: Afghanistan: One new case of wild poliovirus type 1 (WPV1) has been confirmed this week, occurring in Kunar province.
Pakistan: One new case of wild poliovirus type 1 (WPV1) has been confirmed this week, occurring in Balochistan province. This is the first case reported in 2018.

::::::
::::::

WHO Grade 3 Emergencies [to 7 April 2018]
The Syrian Arab Republic - *No new announcements identified*
Iraq - *No new announcements identified*
Nigeria - *No new announcements identified*
South Sudan - *No new announcements identified.*
Yemen - *No new announcements identified.*
[See High-Level Pledging Conference coverage in Milestones above]

::::::

WHO Grade 2 Emergencies [to 7 April 2018]
Democratic Republic of the Congo
:: Reanalysing the humanitarian context to better redefine priorities for action [French]
WHO/Eugene Kabambi
5 April 2018 -- The crisis in the Democratic Republic of the Congo affect more than 13.1 million people, specally affected areas are Tanganyika, Kasai region, Kivus and Ituri. WHO national experts from the Health Emergency Management Team (WHE) and other Country Office clusters (epidemiologists, logisticians, internal and external communications, data managers, finance and travel services etc.), and international experts deployed in the Democratic Republic of the Congo gathered together to review WHO emergency operations in the county.

Bangladesh/Myanmar: Rakhine Conflict 2017 - *No new announcements identified* …
Cameroon - *No new announcements identified*
Central African Republic - *No new announcements identified.*
Ethiopia - *No new announcements identified.*
Libya - *No new announcements identified.*
Niger - *No new announcements identified.*
Ukraine - *No new announcements identified.*

::::::

::::::

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.

DRC

:: Humanitarian Conference on the DRC (13 April 2018)

OCHA, the Kingdom of the Netherlands, the United Arab Emirates and the European Union are hosting a Humanitarian Conference on the Democratic Republic of Congo (DRC) on Friday 13 April 2018, at the Palais des Nations in Geneva.

Syrian Arab Republic

:: Syrian Arab Republic: Response to the East Ghouta Crisis in Rural Damascus Situation Report No. 2 (26 March - 2 April 2018)
Published on 04 Apr 2018

Highlights - Since 9 March, nearly 133,000 IDPs have left the besieged enclave of East Ghouta, either through established corridors to the IDP sites in Rural Damascus or through evacuation agreements to Idleb and Aleppo governorates…

Yemen

:: 2018 Yemen High-Level Pledging Event 3 April 2018

Iraq - *No new announcements identified.*

::::::

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 - *No new announcements identified.*
Rohinga Refugee Crisis - *No new announcements identified.*
Somalia - *No new announcements identified. - No new announcements identified.*
Nigeria - *No new announcements identified.*

::::::
::::::

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

EBOLA/EVD [to 7 April 2018]
http://www.who.int/ebola/en/
- *No new announcements identified.*

MERS-CoV [to 7 April 2018]
http://www.who.int/emergencies/mers-cov/en/

- *No new announcements identified.*

Yellow Fever [to 7 April 2018]
http://www.who.int/csr/disease/yellowfev/en/
- *No new announcements identified.*

Zika virus [to 7 April 2018]
http://www.who.int/csr/disease/zika/en/
- *No new announcements identified.*

::::::
::::::

WHO & Regional Offices [to 7 April 2018]
Latest News
Celebrating World Health Day

6 April 2018 – On World Health Day, 7 April, WHO marks its 70th anniversary. Over the past 7 decades, WHO has spearheaded efforts to rid the world of killer diseases like smallpox and to fight against deadly habits like tobacco use.

To celebrate this occasion, UN Postal Administration, has issued stamps to highlight universal health coverage, this year's theme for the World Health Day, as a subject of universal concern to the peoples of the world.

News release

::::::

Weekly Epidemiological Record, 6 April 2018, vol. 93, 14 (pp. 173–184)
Epidemic meningitis control in countries of the African meningitis belt, 201

::::::

WHO Regional Offices
Selected Press Releases, Announcements
WHO African Region AFRO
Selected Featured News
:: Countries urged to strive for universal access to good quality health to spur economic growth 06 April 2018

WHO Region of the Americas PAHO
:: PAHO calls for breaking down barriers that keep one in three people in the Americas from accessing health (04/04/2018)

WHO South-East Asia Region SEARO
:: Prioritize Universal Health Coverage; provide quality health services to all: WHO New Delhi, 4 April 2018:

WHO European Region EURO
:: Bringing health services closer to people in Kyrgyzstan 05-04-2018

:: On World Health Day, recommit to health for all 05-04-2018
:: Tuberculosis services in Moscow extend "health for all" even to the most vulnerable 03-04-2018

WHO Eastern Mediterranean Region EMRO
:: WHO keeping hospitals and feeding centres alive in Yemen 2 April 2018

WHO Western Pacific Region
- *No new announcements identified.*

::::::
::::::

CDC/ACIP [to 7 April 2018]
http://www.cdc.gov/media/index.html
https://www.cdc.gov/vaccines/acip/index.html
Tuesday, April 3, 2018
Germs with Unusual Antibiotic Resistance Widespread in U.S. - Press Release
Health departments working with CDC's Antibiotic Resistance (AR) Lab Network found more than 220 instances of germs with "unusual" antibiotic resistance genes in the United States last year, according to a CDC Vital Signs report released today.
Germs with unusual resistance include those that cannot be killed by all or most antibiotics, are uncommon in a geographic area or the U.S., or have specific genes that allow them to spread their resistance to other germs.
Rapid identification of the new or rare threats is the critical first step in CDC's containment strategy to stop the spread of antibiotic resistance (AR). When a germ with unusual resistance is detected, facilities can quickly isolate patients and begin aggressive infection control and screening actions to discover, reduce, and stop transmission to others.
"CDC's study found several dangerous pathogens, hiding in plain sight, that can cause infections that are difficult or impossible to treat," said CDC Principal Deputy Director Anne Schuchat, M.D. "It's reassuring to see that state and local experts, using our containment strategy, identified and stopped these resistant bacteria before they had the opportunity to spread."…

::::::

Africa CDC [to 7 April 2018]
https://au.int/en/africacdc
No new digest content identified.

::::::

China CDC
http://www.chinacdc.cn/en/ne/
No new digest content identified.

::::::

ECDC - European Centre for Disease Prevention and Control [to 7 April 2018]
https://ecdc.europa.eu/en/home
Publication 6 Apr 2018
Communicable disease threats report, 1-7 April 2018, week 14

::::::
::::::

Announcements

AERAS [to 7 April 2018]
http://www.aeras.org/pressreleases
Posted on April 03, 2018.
Recap: 5th Global Forum on TB Vaccines
Highlights from New Delhi.

World TB Day 2018
A recap of Aeras World TB Day activities.

BMGF - Gates Foundation [to 7 April 2018]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

Bill & Melinda Gates Medical Research Institute [to 7 April 2018]
https://www.linkedin.com/company/bill-melinda-gates-medical-research-institute/
The Bill & Melinda Gates Medical Research Institute is a non-profit research organization dedicated to combating diseases that impact the world's poorest. We strive to combat inequities in health by accelerating progress in translational science to ensure life-saving products are available and accessible to everyone. We consider ourselves pioneers dedicated to uncovering radical solutions that will close the gap between cutting-edge scientific innovation and its application to challenges in global health.
Published on April 3, 2018
Building the Gates MRI Culture to Achieve our Mission
Penny Heaton
As the CEO of a new medical research institute, I get asked a lot of questions. What types of diseases will the Gates MRI focus on? How is your approach unique, and how do you intend to accelerate progress in translational medicine? These are important questions, but there's one question in particular that I've found myself thinking about since the conception of the Gates MRI: what kind of culture is necessary to achieve our mission and save lives?...

CEPI – Coalition for Epidemic Preparedness Innovations [to 7 April 2018]
http://cepi.net/
No new digest content identified.

EDCTP [to 7 April 2018]
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
Latest news
No new digest content identified.

Emory Vaccine Center [to 7 April 2018]
http://www.vaccines.emory.edu/
No new digest content identified.

European Medicines Agency [to 7 April 2018]
http://www.ema.europa.eu/ema/
No new digest content identified.

European Vaccine Initiative [to 7 April 2018]
http://www.euvaccine.eu/news-events
No new digest content identified.

FDA [to 7 April 2018]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
What's New for Biologics
April 4, 2018 Approval Letter - Flublok Quadrivalent (PDF - 32KB)
Posted: 4/6/2018

Fast Track Designation Request Performance
Posted: 4/6/2018
The Food and Drug Administration Modernization Act of 1997 (FDAMA) includes Section 112, "Expediting study and approval of fast track drugs." This section mandates the Agency to facilitate the development and expedite review of drugs and biologics intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs. Fast track adds to existing programs, such as accelerated approval, the possibility of a "rolling review" for an application. An important feature of fast track is that it emphasizes the critical nature of close early communication between the FDA and sponsor to improve the efficiency of product development.
To be eligible for the fast track program, an applicant must submit a request with supporting documentation for fast track designation for the product and its proposed use. FDA is required by the statute to decide within 60 days of receipt of the request whether the conditions for fast track designation have been met. This report illustrates CBER's performance in reviewing and deciding on these requests.
Details on the FDA fast track program, including Section 112 of FDAMA and the proposed and final rules in the Federal Register can be found in the Guidance for Industry: Expedited

Programs for Serious Conditions—Drugs and Biologics - 5/2014; Appendix 2; Appendix 3 - (CDER MAPP 6020.3); CBER SOPP 8405; Appendix 4.

Fondation Merieux [to 7 April 2018]
http://www.fondation-merieux.org/
No new digest content identified.

Gavi [to 7 April 2018]
http://www.gavi.org/library/news/press-releases/
03 April 2018
New typhoid vaccine to receive Gavi support
Gavi has earmarked US$ 85 million to fund the introduction of the vaccine in the world's poorest countries.

Geneva, 3 April 2018 – Governments across Africa and Asia can apply for funding to protect children against typhoid fever. Gavi, the Vaccine Alliance will support eligible countries to introduce the new typhoid conjugate vaccine into their routine immunisation schedules. "The typhoid conjugate vaccine will not only save lives, but also bolster the fight against anti-microbial drug-resistance," said Dr Seth Berkley CEO of Gavi, the Vaccine Alliance. "Expanding vaccine coverage will play an important role in reducing illnesses and deaths from typhoid. Gavi is looking forward to working with countries to support the introduction of this safe and effective vaccine."…

GHIT Fund [to 7 April 2018]
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 •
No new digest content identified.

Global Fund [to 7 April 2018]
http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=
No new digest content identified.

Hilleman Laboratories [to 7 April 2018]
http://www.hillemanlabs.org/
No new digest content identified.

Human Vaccines Project [to 7 April 2018]
http://www.humanvaccinesproject.org/media/press-releases/
No new digest content identified.

IAVI [to 7 April 2018]

https://www.iavi.org/
April 5, 2018
IAVI Welcomes Distinguished New Members to its Board of Directors
Linda-Gail Bekker, Mark Dybul, and Christina Hull Paxson join IAVI Board in 1Q 2018
The International AIDS Vaccine Initiative (IAVI) is pleased to announce that Linda-Gail Bekker, MBChB, DTMH, DCH, FCP(SA), PhD; The Hon. Mark Dybul, MD; and Christina Hull Paxson, PhD, have been appointed to IAVI's Board of Directors.
"IAVI welcomes these exceptionally accomplished and visionary leaders to our Board and is honored to have them as partners in our efforts to accelerate the development of an effective HIV vaccine and other urgently needed prevention measures," said Mark Feinberg, MD, PhD, CEO of IAVI. "Together they bring a deep understanding of the communities most affected by HIV/AIDS and a remarkable track record for innovation and collaboration in global health programs and policies."…

IFFIm
http://www.iffim.org/library/news/press-releases/
No new digest content identified.

IVAC [to 7 April 2018]
https://www.jhsph.edu/research/centers-and-institutes/ivac/index.html
IVAC Blog
IVAC's Executive Director Kate O'Brien, MD, MPH has been selected as one of the prestigious Canada 150 Research Chairs.
The announcement follows another important honor for Dr. O'Brien, an appointment to the Gavi Board and the Policy and Performance Committee.

IVI [to 7 April 2018]
http://www.ivi.int/
No new digest content identified.

JEE Alliance [to 7 April 2018]
https://www.jeealliance.org/
No new digest content identified.

MSF/Médecins Sans Frontières [to 7 April 2018]
http://www.doctorswithoutborders.org/news-stories/press/press-releases
No new digest content identified.

NIH [to 7 April 2018]
http://www.nih.gov/news-events/news-releases
April 6, 2018
Research offers clues for improved influenza vaccine design

— These efforts contribute to NIAID's larger plan to develop a universal influenza vaccine. *Article:* Y Chen et al. Influenza infection in humans induces broadly cross-reactive and protective neuraminidase-reactive antibodies. Cell DOI: 10.1016/j.cell.2018.03.030 (2018).

NIH completes in-depth genomic analysis of 33 cancer types

April 5, 2018 — Data set includes molecular and clinical information from over 10,000 tumors.

PATH [to 7 April 2018]
http://www.path.org/news/index.php
No new digest content identified.

Sabin Vaccine Institute [to 7 April 2018]
http://www.sabin.org/updates/pressreleases
No new digest content identified.

UNAIDS [to 7 April 2018]
http://www.unaids.org/en
Update
Bordeaux signs Paris Declaration to end the AIDS epidemic in cities
05 April 2018

On 4 April, Bordeaux became the latest city to sign up to the Paris Declaration to end the AIDS epidemic in cities. The Mayor of Bordeaux and former French Prime Minister Alain Juppé signed the declaration alongside UNAIDS Executive Director Michel Sidibé at the opening of AFRAVIH, the international francophone HIV and hepatitis conference being held in Bordeaux, France, from 4 to 7 April.

UNICEF [to 7 April 2018]
https://www.unicef.org/media/
Selected Press Releases
No new digest content identified.

Vaccine Confidence Project [to 7 April 2018]
http://www.vaccineconfidence.org/
No new digest content identified.

Vaccine Education Center – Children's Hospital of Philadelphia [to 7 April 2018]
http://www.chop.edu/centers-programs/vaccine-education-center
No new digest content identified.

Wellcome Trust [to 7 April 2018]
https://wellcome.ac.uk/news

No new digest content identified.

The Wistar Institute [to 7 April 2018]
https://www.wistar.org/news/press-releases
Press Release Apr. 4, 2018
Wistar Professor Chi Van Dang Named AACR Academy Fellow
Wistar Institute professor Chi Van Dang was elected as a Fellow of the American Association for Cancer Research (AACR) Academy Class of 2018.

::::::

BIO [to 7 April 2018]
https://www.bio.org/insights/press-release
No new digest content identified.

DCVMN – Developing Country Vaccine Manufacturers Network [to 7 April 2018]
7 April 2018
Regional workshop: Optimization of vaccines' manufacturing, containers and testing for global supply
7 May 2018 to 10 May 2018
Hyderabad / India

IFPMA [to 7 April 2018]
http://www.ifpma.org/resources/news-releases/
No new digest content identified.

PhRMA [to 7 April 2018]
http://www.phrma.org/press-room
No new digest content identified.

* * * *

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

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

No digest content identified.

* * * *

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
April 2018 Volume 46, Issue 4, p363-478, e25-e30
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
April 2018 Volume 54, Issue 4, p479-610, e59-e82
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
April 2018 108(4)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
Volume 98, Issue 3, 2018
http://www.ajtmh.org/content/journals/14761645/98/3
[Reviewed earlier]

Annals of Internal Medicine
3 April 2018 Vol: 168, Issue 7
http://annals.org/aim/issue
[New issue; No digest content identified]

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 7 April 2018)
[No new digest content identified]

BMJ Global Health

March 2018 - Volume 3 - 2
http://gh.bmj.com/content/3/2
[Reviewed earlier]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 7 April 2018)
Research article
Health workers' experiences of coping with the Ebola epidemic in Sierra Leone's health system: a qualitative study
The 2014 Ebola Virus Disease epidemic evolved in alarming ways in Sierra Leone spreading to all districts. The country struggled to control it against a backdrop of a health system that was already over-burden...
Authors: Joanna Raven, Haja Wurie and Sophie Witter
Citation: BMC Health Services Research 2018 18:251
Published on: 5 April 2018

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 7 April 2018)
Research article
Effectiveness of 13-pneumococcal conjugate vaccine (PCV13) against invasive pneumococcal disease in children in the Dominican Republic
Limited data are available on the effectiveness of 13-valent pneumococcal conjugate vaccine (PCV13) in resource-poor settings and PCV naïve populations. The Dominican Republic introduced PCV13 in September 201...
Authors: Sara Tomczyk, Fernanda C. Lessa, Jacqueline Sánchez, Chabela Peña, Josefina Fernández, M. Gloria Carvalho, Fabiana Pimenta, Doraliza Cedano, Cynthia G. Whitney, Jennifer R. Verani, Hilma Coradin, Zacarías Garib, Lucia Helena De Oliveira and Jesús Feris-Iglesias
Citation: BMC Infectious Diseases 2018 18:152
Published on: 2 April 2018

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 7 April 2018)
[No new digest content identified]

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 7 April 2018)
Debate
| 3 April 2018
Real-world evidence: How pragmatic are randomized controlled trials labeled as pragmatic?

Pragmatic randomized controlled trials (RCTs) mimic usual clinical practice and they are critical to inform decision-making by patients, clinicians and policy-makers in real-world settings. Pragmatic RCTs assess effectiveness of available medicines, while explanatory RCTs assess efficacy of investigational medicines. Explanatory and pragmatic are the extremes of a continuum. This debate article seeks to evaluate and provide recommendation on how to characterize pragmatic RCTs in light of the current landscape of RCTs. It is supported by findings from a PubMed search conducted in August 2017, which retrieved 615 RCTs self-labeled in their titles as "pragmatic" or "naturalistic". We focused on 89 of these trials that assessed medicines (drugs or biologics).
Authors: Rafael Dal-Ré, Perrine Janiaud and John P. A. Ioannidis

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 7 April 2018)
[No new digest content identified]

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 7 April 2018)
[No new digest content identified]

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 7 April 2018)
Research note
Is there an association between the use of complementary medicine and vaccine uptake: results of a pilot study
Despite the incredible success of paediatric immunisation, support is not universal. It has been suggested that complementary medicine practitioners enable vaccine rejection and his study aims to explore the relationship between complementary medicine use and paediatric vaccination. A total of 149 Australian parents were recruited via a parenting website and Facebook groups to complete an online questionnaire… These findings highlight an interface between lower vaccine uptake and visits to complementary medicine practitioners. These results emphasise the need to examine the routine paediatric care practices of complementary medicine practitioners as a crucial piece of the puzzle in understanding vaccine rejection.
Authors: Jane E. Frawley, Erica McIntyre, Jon Wardle and Debra Jackson
Citation: BMC Research Notes 2018 11:217
Published on: 2 April 2018

BMJ Open
April 2018 - Volume 8 - 4
http://bmjopen.bmj.com/content/current
[New issue; No digest content identified]

Bulletin of the World Health Organization
Volume 96, Number 4, April 2018, 225-296
http://www.who.int/bulletin/volumes/96/4/18-000418/en/
EDITORIALS
How can we accelerate progress on civil registration and vital statistics?
Carla AbouZahr, Martin W Bratschi, Daniel Cobos Muñoz, Romain Santon, Nicola Richards, Ian Riley & Philp Setel
http://dx.doi.org/10.2471/BLT.18.211086

RESEARCH
Prevention of mother-to-child transmission of HIV: a cross-sectional study in Malawi
M van Lettow, M Landes, JJ van Oosterhout, E Schouten, H Phiri, E Nkhoma, T Kalua, S Gupta, N Wadonda, A Jahn & B Tippett-Barr
http://dx.doi.org/10.2471/BLT.17.203265

SYSTEMATIC REVIEWS
Antibiotic stewardship interventions in hospitals in low-and middle-income countries: a systematic review
Christophe Van Dijck, Erika Vlieghe & Janneke Arnoldine Cox
http://dx.doi.org/10.2471/BLT.17.203448

LESSONS FROM THE FIELD
Post-earthquake health-service support, Nepal
Sophie Goyet, Rajan Rayamajhi, Badry Nath Gyawali, Bhola Ram Shrestha, Guna Raj Lohani, Damodar Adhikari, Edwin Salvador, Roderico Ofrin, Jos Vandelaer & Reuben Samuel
http://dx.doi.org/10.2471/BLT.17.205666

Child Care, Health and Development
Volume 44, Issue 3 Pages: 343-506 May 2018
https://onlinelibrary.wiley.com/toc/13652214/current
[New issue; No digest content identified]

Clinical and Experimental Vaccine Research
Volume 7(1); January 2018
http://ecevr.org/
[Reviewed earlier]

Clinical Therapeutics
March 2018 Volume 40, Issue 3, p353-496
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Conflict and Health

http://www.conflictandhealth.com/
[Accessed 7 April 2018]
[Ne new digest content identified]

Contemporary Clinical Trials
Volume 66 Pages 1-92 (March 2018)
https://www.sciencedirect.com/journal/contemporary-clinical-trials/vol/66/suppl/C
[Reviewed earlier]

Current Opinion in Infectious Diseases
April 2018 - Volume 31 - Issue 2
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
March 2018 Volume 18, Issue 1 Pages 1–64
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2018.18.issue-1/issuetoc
Special Issue: Rebuilding Patient-Physician Trust in China, Developing a Trust-Oriented Bioethics
[Reviewed earlier]

Development in Practice
Volume 28, Issue 2, 2018
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Disaster Medicine and Public Health Preparedness
Volume 12 - Issue 1 - February 2018
https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/latest-issue
[Reviewed earlier]

Disasters
April 2018 Volume 42, Issue 2 Pages 205–404
http://onlinelibrary.wiley.com/doi/10.1111/disa.2018.42.issue-2/issuetoc
[Reviewed earlier]

EMBO Reports
01 April 2018; volume 19, issue 4
http://embor.embopress.org/content/19/4?current-issue=y
[New issue; No digest content identified]

Emerging Infectious Diseases
Volume 24, Number 4—April 2018
http://wwwnc.cdc.gov/eid/
[New issue; No digest content identified]

Epidemics
Volume 22, Pages 1-78 (March 2018)
https://www.sciencedirect.com/journal/epidemics/vol/22/suppl/C
Special Issue: The RAPIDD Ebola Forecasting Challenge
[Reviewed earlier]

Epidemiology and Infection
Volume 146 - Issue 5 - April 2018
https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue
[New issue; No digest content identified]

The European Journal of Public Health
Volume 28, Issue 1, 1 February 2018
https://academic.oup.com/eurpub/issue/28/1
[Reviewed earlier]

Global Health Action
Volume 10, 2017 – Issue 1 [In Progress]
http://www.tandfonline.com/toc/zgha20/10/1?nav=tocList
[Reviewed earlier]

Global Health: Science and Practice (GHSP)
Vol. 6, No. 1 March 21, 2018
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Public Health
Volume 13, 2017 Issue 5
http://www.tandfonline.com/toc/rgph20/current
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 7 April 2018]

[No digest content identified]

Health Affairs
March 2018. Vol. 37, No. 3
https://www.healthaffairs.org/toc/hlthaff/current
Advancing Health Equity
[Reviewed earlier]

Health and Human Rights
Volume 19, Issue 2, December 2017
http://www.hhrjournal.org/
Special Section on Romani People and the Right to Health
[Reviewed earlier]

Health Economics, Policy and Law
Volume 13 - Issue 2 - April 2018
https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue
[Reviewed earlier]

Health Policy and Planning
Volume 33, Issue 3, 1 April 2018
http://heapol.oxfordjournals.org/content/current
Methodological Musings
Distributional cost-effectiveness analysis in low- and middle-income countries: illustrative example of rotavirus vaccination in Ethiopia
Bryony R Dawkins; Andrew J Mirelman; Miqdad Asaria; Kjell Arne Johansson; Richard A Cookson
Health Policy and Planning, Volume 33, Issue 3, 1 April 2018, Pages 456–463,
https://doi.org/10.1093/heapol/czx175

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 7 April 2018]
[No new digest content identified]

Humanitarian Exchange Magazine
Number 71 March 2018
https://odihpn.org/magazine/humanitarian-response-urban-areas/
Humanitarian response in urban areas
Humanitarian crises are increasingly affecting urban areas either directly, through civil conflict, hazards such as flooding or earthquakes, urban violence or outbreaks of disease, or indirectly, through hosting people fleeing these threats. The humanitarian sector has been slow

to understand how the challenges and opportunities of working in urban spaces necessitate changes in how they operate. For agencies used to working in rural contexts, the dynamism of the city, with its reliance on markets, complex systems and intricate logistics, can be a daunting challenge. Huge, diverse and mobile populations complicate needs assessments, and close coordination with other, often unfamiliar, actors is necessary.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 14, Issue 3 2018
http://www.tandfonline.com/toc/khvi20/current
Special Issue on Influenza Vaccines, commemorating the 100th anniversary of Pandemic Flu
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 7 April 2018]
[No new digest content identified]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 7 April 2018]
[No new digest content identified]

International Health
Volume 10, Issue suppl_1, 1 March 2018
http://inthealth.oxfordjournals.org/content/current
Special Issue: Onchocerciasis: The Beginning of the End
[Reviewed earlier]

International Journal of Community Medicine and Public Health
Vol 5, No 4 (2018) April 2018
http://www.ijcmph.com/index.php/ijcmph/issue/view/36
Editorial
Rise of human devastation syndrome in Syria
Syed Roshaan Ahmed, Syed Uzair Mahmood, Haema Waheed
Abstract
The Syria Civil War, which started in 2011, has killed 400,000 people. It has forced more than 11 million people to suffer and has caused not only the people to migrate but also to be displaced within their own country. The war has brought only misery in the lives of Syrians as the damage has only focused on residents of the region in combat. The children have faced the worst, losing their parents, siblings or even friends to violence, suffering physical and psychological trauma. Out of the 11 million and more people who have suffered, 4.9 million

Syrians are refugees and 6.1 million have displaced within Syria, out of which half of those affected are children.

The end result of the continued Syria Civil War is that those who have managed to survive have been severely damaged both physically and psychologically, disturbing their interpersonal, psychosocial, physical and mental health. The incidence of post traumatic stress disorder (PTSD) increases in such a situation, which tends to affect the lives of the Syrian people permanently.

Original Research Articles

Compliance of anti-rabies vaccine among dog bite victims in an urban slum of Chennai: a cross sectional study
Shivasakthimani R., Vinoth Gnana Chellaiyan D., Ravivarman G., Murali R.
DOI: 10.18203/2394-6040.ijcmph20181222

Evaluation of dog anti rabies vaccination centres and post exposure prophylaxis against rabies centres in an urban area
Rambadan P. Chauhan
DOI: 10.18203/2394-6040.ijcmph20181231

A study of vaccination delay among under-five attendees at an immunisation clinic in a rural area of Goa
Elvira Noronha, Hemangini K. Shah
DOI: 10.18203/2394-6040.ijcmph20181247

International Journal of Epidemiology
Volume 47, Issue 1, 1 February 2018
https://academic.oup.com/ije/issue/47/1
[Reviewed earlier]

International Journal of Human Rights in Healthcare
Volume 11 Issue 1 2018
https://www.emeraldinsight.com/toc/ijhrh/11/1
[Reviewed earlier]

International Journal of Infectious Diseases
March 2018 Volume 68, In Progress
http://www.ijidonline.com/issue/S1201-9712(18)X0002-2
[Reviewed earlier]

JAMA
April 3, 2018, Vol 319, No. 13, Pages 1293-1405
http://jama.jamanetwork.com/issue.aspx
Viewpoint
Institutional Research Misconduct Reports Need More Credibility

C. K. Gunsalus, JD; Adam R. Marcus, MA; Ivan Oransky, MD
free access
JAMA. 2018;319(13):1315-1316. doi:10.1001/jama.2018.0358
This Viewpoint highlights the inadequacy and lack of transparency of most research institutions' responses to allegations of research misconduct, and describes development of a proposed checklist to establish definitions and standards for complete research integrity investigations.
Abstract
Institutions have a central role in protecting the integrity of research. They employ researchers, own the facilities where the work is conducted, receive grant funding, and teach many students about the research process. When questions arise about research misconduct associated with published articles, scientists and journal editors usually first ask the researchers' institution to investigate the allegations and then report the outcomes, under defined circumstances, to federal oversight agencies and other entities, including journals.1

Big Data and Machine Learning in Health Care
Andrew L. Beam, PhD; Isaac S. Kohane, MD, PhD
JAMA. 2018;319(13):1317-1318. doi:10.1001/jama.2017.18391
This Viewpoint discusses how newer technologies such as machine learning and the compilation of "big data" can be used for research and clinical applications.
Abstract
Nearly all aspects of modern life are in some way being changed by big data and machine learning. Netflix knows what movies people like to watch and Google knows what people want to know based on their search histories. Indeed, Google has recently begun to replace much of its existing non–machine learning technology with machine learning algorithms, and there is great optimism that these techniques can provide similar improvements across many sectors. It is no surprise then that medicine is awash with claims of revolution from the application of machine learning to big health care data. Recent examples have demonstrated that big data and machine learning can create algorithms that perform on par with human physicians.1 Though machine learning and big data may seem mysterious at first, they are in fact deeply related to traditional statistical models that are recognizable to most clinicians. It is our hope that elucidating these connections will demystify these techniques and provide a set of reasonable expectations for the role of machine learning and big data in health care.

JAMA Pediatrics
April 2018, Vol 172, No. 4, Pages 309-400
http://archpedi.jamanetwork.com/issue.aspx
[New issue; No digest content identified]

JBI Database of Systematic Review and Implementation Reports
March 2018 - Volume 16 - Issue 3
http://journals.lww.com/jbisrir/Pages/currenttoc.aspx
[Reviewed earlier]

Journal of Adolescent Health
March 2018 Volume 62, Issue 3, Supplement, S1-S86

http://www.jahonline.org/issue/S1054-139X(17)X0028-1
Adolescent and Young Adult Male Health
Edited by Paritosh Kaul
Editorial
Serving the Underserved: The Health and Well-Being of Adolescent and Young Adult Males
Paritosh Kaul, Charles E. Irwin Jr
S1–S2
[Initial text]
Adolescent and young adult male health has received little attention despite decades of high mortality and morbidity rates [[1], [2]]. Across the lifespan, particularly during the second and third decades of life, males have worse outcomes than females in a number of areas, such as substance use, unintentional injury, and suicide [1. And yet, males have lower health-care utilization and higher levels of unmet needs than females [[3], [4]]. In the United States, life expectancy for males is also consistently lower than for females [5. The adolescent and young adult (AYA) male is underserved in health-care delivery systems, public health and policy, and research arena. In 2012, Saewyc lamented that sexual and reproductive health research aimed at impacting policy and clinical practice did not include boys and young men [6. In 2017, after a gap of 5 years, Fortenberry also noted the lack of progress in addressing AYA male sexual health services [7. In the recent Global Adolescent Study, Blum et al. highlighted many of the gender differences that are accentuated during the onset and completion of puberty, and how these changes place adolescent boys at risk for a number of negative health outcomes [8. In publishing this supplement of the Journal of Adolescent Health, our endeavor is to further increase attention on AYA males, and, in so doing, inspire some possible solutions to clinicians, policy makers, and investigators concerned with improving the health and well-being of AYA males…

Review Articles
Age-Specific Global Prevalence of Hepatitis B, Hepatitis C, HIV, and Tuberculosis Among Incarcerated People: A Systematic Review
This study is a systematic review and meta-analysis of studies reporting the age-specific prevalence of each infection in prisoners. We grouped age-specific prevalence estimates into three overlapping age categories: AYA prisoners (<25 years), older prisoners (≥25 years), and mixed category (spanning age 25 years). We used random effects meta-analysis to estimate the relative risk (RR) of each infection in AYAs versus older prisoners.
Stuart A. Kinner, Kathryn Snow, Andrea L. Wirtz, Frederick L. Altice, Chris Beyrer, Kate Dolan
S18–S26
Published in issue: March 2018

Journal of Community Health
Volume 43, Issue 2, April 2018
https://link.springer.com/journal/10900/43/2/page/1
[Reviewed earlier]

Journal of Empirical Research on Human Research Ethics
Volume 13, Issue 2, April 2018

http://journals.sagepub.com/toc/jre/current
Ethical Issues in Biobanking and use of Biospecimens
[Reviewed earlier]

Journal of Epidemiology & Community Health
April 2018 - Volume 72 - 4
http://jech.bmj.com/content/current
[New issue; No digest content identified]

Journal of Evidence-Based Medicine
February 2018 Volume 11, Issue 1 Pages 1–67
http://onlinelibrary.wiley.com/doi/10.1111/jebm.2018.11.issue-1/issuetoc
[Reviewed earlier]

Journal of Global Ethics
Volume 13, Issue 3, 2017
http://www.tandfonline.com/toc/rjge20/current
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 29, Number 1, February 2018
https://muse.jhu.edu/issue/38046
[Reviewed earlier]

Journal of Humanitarian Logistics and Supply Chain Management
Volume 8 Issue 1
https://www.emeraldinsight.com/toc/jhlscm/8/1
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 20, Issue 2, April 2018
https://link.springer.com/journal/10903/20/2/page/1
[Reviewed earlier]

Journal of Immigrant & Refugee Studies
Volume 16, 2018_ Issue 1-2
http://www.tandfonline.com/toc/wimm20/current
Special Issue: Mediatization and Politicization of Refugee Crisis in Europe
[Reviewed earlier]

Journal of Infectious Diseases
Volume 217, Issue 8 15 April 2018
https://academic.oup.com/jid/issue
PERSPECTIVE
Call to Action: Prevention of Mother-to-Child Transmission of Hepatitis B in Africa
Peyton Wilson; Jonathan B Parr; Ravi Jhaveri; Steve R Meshnick
The Journal of Infectious Diseases, Volume 217, Issue 8, 28 March 2018, Pages 1180–1183,
https://doi.org/10.1093/infdis/jiy028
Abstract
Hepatitis B virus (HBV) is a significant public health issue that has not been adequately addressed, especially in the high-prevalence region of Africa. Despite the incorporation of HBV vaccines into the Expanded Program on Immunization, children continue to be infected with HBV through maternal-to-child transmission (MTCT). The addition of a birth dose of HBV vaccine would be a cost-effective method to reduce MTCT. Birth-dose HBV vaccine policies have been adopted in the Western Pacific region but not yet in Africa. Even better protection against HBV MTCT can be achieved by treatment of pregnant women with high HBV viral loads with tenofovir. Tenofovir is already widely used in prevention of HIV MTCT (PMTCT) programs. We suggest that existing HIV PMTCT programs could be expanded to deliver care for HBV-infected pregnant women. With appropriate adoption of birth-dose vaccination policies and expansion of PMTCT programs, elimination of HBV MTCT in Africa is achievable.

MAJOR ARTICLES AND BRIEF REPORTS
Isolation of Vaccine-Like Poliovirus Strains in Sewage Samples From the United Kingdom
Manasi Majumdar; Dimitra Klapsa; Thomas Wilton; Joyce Akello; Catherine Anscombe ...
The Journal of Infectious Diseases, Volume 217, Issue 8, 28 March 2018, Pages 1222–1230,
https://doi.org/10.1093/infdis/jix667
We describe the isolation of vaccine-like poliovirus in sewage samples using concentration methods followed by cell culture infection and next generation sequencing. Using this approach, we rapidly obtained whole-genome sequences of polio and nonpoliovirus enterovirus strains present in mixtures.

Journal of Medical Ethics
April 2018 - Volume 44 - 4
http://jme.bmj.com/content/current
[Reviewed earlier]

Journal of Medical Internet Research
Vol 20, No 4 (2018): April
http://www.jmir.org/2018/4
Vaccine Images on Twitter: Analysis of What Images are Shared
Tao Chen, Mark Dredze
J Med Internet Res 2018 (Apr 03); 20(4):e130

Journal of Medical Microbiology

Volume 67, Issue 3, March 2018
http://jmm.microbiologyresearch.org/content/journal/jmm/67/3
[New issue; No digest content identified]

Journal of Patient-Centered Research and Reviews
Volume 5, Issue 1 (2018)
https://digitalrepository.aurorahealthcare.org/jpcrr/
Health Disparities and Inequities: Part II
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 7, Issue 1 March 2018
https://academic.oup.com/jpids/issue
[Reviewed earlier]

Journal of Pediatrics
April 2018 Volume 195, p1-312
http://www.jpeds.com/current
Original Articles
Association of Health Insurance Status and Vaccination Coverage among Adolescents 13-17 Years of Age
Peng-jun Lu, David Yankey, Jenny Jeyarajah, Alissa O'Halloran, Benjamin Fredua, Laurie D. Elam-Evans, Sarah Reagan-Steiner
p256–262.e1
Published online: February 2, 2018

Journal of Pharmaceutical Policy and Practice
https://joppp.biomedcentral.com/
[Accessed 7 April 2018]
[No new digest content identified]

Journal of Public Health Management & Practice
March/April 2018 - Volume 24 - Issue 2
http://journals.lww.com/jphmp/pages/default.aspx
[Reviewed earlier]

Journal of Public Health Policy
Volume 39, Issue 1, February 2018
https://link.springer.com/journal/41271/39/1/page/1
[Reviewed earlier]

Journal of the Royal Society – Interface
March 2018; volume 15, issue 140
http://rsif.royalsocietypublishing.org/content/current
[Reviewed earlier]

Journal of Travel Medicine
Volume 25, Issue 1, 1 January 2018
https://academic.oup.com/jtm/issue/25/1
[Reviewed earlier]

Journal of Virology
March 2018, volume 92, issue 6
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Apr 07, 2018 Volume 391 Number 10128 p1331-1454
http://www.thelancet.com/journals/lancet/issue/current
Editorial
The collapse of the Venezuelan health system
The Lancet
When Hugo Chavez became Venezuela's new president in 1998, he promised to provide free health care to all and enshrined this right within Venezuela's new constitution, rewritten in 1999. Progress was rapid and initial results were promising: according to the World Bank, life expectancy at birth rose from 71·8 to 74·1 years for both genders and infant mortality fell from 26·7 to 14·6 deaths per 1000 live births between 1998 and 2013, the period of Chavez's rule. Success was recognised on the international stage and Venezuela achieved most of the UN's Millennium Development Goals set for 2010. This initial success came on a backdrop of high oil prices providing the necessary government funding for public health-care spending and food imports. At the same time, a strong relationship with Cuba saw an agreement in 2003 that, in exchange for low-cost oil, Cuba would provide doctors, medical training, and medical supplies free of charge to Venezuela.

However, when the oil price began to fall in 2008 and Chavez's revolutionary politics alienated foreign investors, the tide turned. The largest oil reserves in the world could not stave off economic collapse as lower demand for oil, excessive government spending, US sanctions, and price controls led to rocketing inflation and falling gross domestic product. The impact on the health-care system was exacerbated by exchange rate controls, which led to a shortage of the foreign currency needed to import equipment, food, and medicines.

Official government data are hard to come by. The last official report from the Venezuelan Ministry of Health was published in 2016 (Boletin Epidemiologico) and the then Health Minister, Antonieta Corporale, was rewarded by being sacked immediately thereafter by Nicolas Maduro, who has been leading the country since 2013 (Venezuela has had 17 different ministers of health in the past 20 years). The results of this report were highlighted in a Lancet World

Report in August, 2017, which noted the untenable situation in Venezuela. This government report revealed a 65% increase in maternal mortality and a 30% increase in infant mortality, with 11 466 infants dying during 2016. It also revealed that while Venezuela had been the first country in the world to eliminate malaria in populated areas, this and other diseases such as diphtheria, which had previously been controlled, had returned in several outbreaks.

Health-care outcomes have continued to deteriorate rapidly. The Venezuelan Government has steadily reduced the share of its annual expenditure dedicated to public health-care spending from a high of 9·1% in 2010 to 5·8% in 2014. Medical supplies have been reported as going missing or getting embargoed and sitting in ports, with some media alleging corruption hindering distribution. Some of these are for treating heart disease and diabetes—the leading causes of death in Venezuela, according to WHO. As a result, patients have resorted to bringing their own surgical instruments, drugs, and food to hospital. In private practice, medical professionals charge in US dollars, which makes health care unaffordable to most of the population.

A recent national survey—Encuesta Nacional de Hospitales 2018 from the political opposition, the National Assembly, and the Venezuelan non-govermental organisation Médicos por la Salud—revealed that Venezuela's health crisis is worse than anticipated. The survey, conducted between March 1–10, 2018, assessed the performance of 104 public and 33 private hospitals in Venezuela. According to the figures, most laboratory services and hospital nutrition services are only available intermittently or are completely inoperative. Shortages of items such as basic medicines, catheters, surgical supplies, and infant formula are highlighted in the survey; 14% of intensive care units have been shut down because they are unable to operate and 79% of the facilities analysed have no water at all.

Venezuela's Government has allowed the country's infrastructure to crumble, with fatal consequences for ordinary Venezuelans. Without regular reports on basic health indicators, assessment of the impact of the crisis is difficult. However, the Encuesta Nacional de Hospitales 2018 survey shows a shocking decline in health-care performance and a failure of the system. Aware of this humanitarian crisis, as declared by the political opposition in 2017, worldwide humanitarian aid has been offered by multiple countries and the UN. Yet Venezuela's Government has refused this humanitarian aid, denying the existence of a crisis. It is time to end the abuse of power by the Venezuelan Government, and take immediate steps to address the heavy toll on the wellbeing of Venezuelans.

Lancet Global Health
Apr 2018 Volume 6 Number 4 e351-e468
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

Lancet Infectious Diseases
Apr 2018 Volume 18 Number 4 p357-474 e107-e159
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Lancet Respiratory Medicine
Apr 2018 Volume 6 Number 4 p231-314 e11-e15
http://www.thelancet.com/journals/lanres/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 22, Issue 4, April 2018
https://link.springer.com/journal/volumesAndIssues/10995
[Reviewed earlier]

Medical Decision Making (MDM)
Volume 38, Issue 3, April 2018
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
Volume 96, Issue 1 Pages: 1-212 March 2018
https://onlinelibrary.wiley.com/toc/14680009/96/1
[New issue; No digest content identified]

Nature
Volume 556 Issue 7699, 5 April 2018
http://www.nature.com/nature/current_issue.html
World View | 27 March 2018
Use our personal data for the common good
Technology giants should take lessons from the Human Genome Project and be data stewards, not data owners, says Hetan Shah.
Hetan Shah

Nature Medicine
March 2018, Volume 24 No 3 pp247-374
https://www.nature.com/nm/journal/v24/n3/index.html
[Reviewed earlier]

Nature Reviews Immunology
March 2018 Vol 18 No 3
https://www.nature.com/nri/journal/v18/n3/index.html
Focus on: Cancer immunotherapy
[Reviewed earlier]

New England Journal of Medicine
April 5, 2018 Vol. 378 No. 14
http://www.nejm.org/toc/nejm/medical-journal
Review Article
The Key Role of Epigenetics in Human Disease Prevention and Mitigation
Andrew P. Feinberg, M.D., M.P.H.
Epigenetics is the regulation of gene expression through alterations in DNA or associated factors (other than the DNA sequence). These factors control the diverse manifestations of diseases. Insights into epigenetic modification may lead to new therapies for common diseases.

Pediatrics
April 2018, VOLUME 141 / ISSUE 4
http://pediatrics.aappublications.org/content/141/4?current-issue=y
Articles
Open Access
Influenza-Associated Pediatric Deaths in the United States, 2010–2016
Mei Shang, Lenee Blanton, Lynnette Brammer, Sonja J. Olsen, Alicia M. Fry
Pediatrics Apr 2018, 141 (4) e20172918; DOI: 10.1542/peds.2017-2918
Children <2 years old had the highest influenza-associated pediatric mortality in the United States from 2010 to 2016. Half of the deaths occurred in previously healthy children.

Mobile Phone Incentives for Childhood Immunizations in Rural India
Rajeev Seth, Ibukunoluwa Akinboyo, Ankur Chhabra, Yawar Qaiyum, Anita Shet, Nikhil Gupte, Ajay K. Jain, Sanjay K. Jain
Pediatrics Apr 2018, 141 (4) e20173455; DOI: 10.1542/peds.2017-3455
The delivery of automated compliance-linked mobile phone incentives via a cloud-based, biometric-linked record and reminder software platform improves childhood immunizations in rural India.

Quality Reports
Provider Communication, Prompts, and Feedback to Improve HPV Vaccination Rates in Resident Clinics
Cynthia M. Rand, Stanley J. Schaffer, Nui Dhepyasuwan, Aaron Blumkin, Christina Albertin, Janet R. Serwint, Paul M. Darden, Sharon G. Humiston, Keith J. Mann, William Stratbucker, Peter G. Szilagyi
Pediatrics Apr 2018, 141 (4) e20170498; DOI: 10.1542/peds.2017-0498
A bundled intervention of provider prompts and training in communication skills plus performance feedback increased captured opportunities for HPV vaccination in 8 continuity clinics.

Pharmaceutics
Volume 10, Issue 1 (March 2018)
http://www.mdpi.com/1999-4923/10/1
[Reviewed earlier]

PharmacoEconomics
Volume 36, Issue 4, April 2018
https://link.springer.com/journal/40273/36/4/page/1
[Reviewed earlier]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 7 April 2018]
[No new digest content identified]

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
[Accessed 7 April 2018]
[No new digest content identified]

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 7 April 2018)
Essay
Preprints: An underutilized mechanism to accelerate outbreak science
Michael A. Johansson, Nicholas G. Reich, Lauren Ancel Meyers, Marc Lipsitch
| published 03 Apr 2018 PLOS Medicine
https://doi.org/10.1371/journal.pmed.1002549
Summary points
:: Preprints—manuscripts posted openly online prior to peer review—offer an opportunity to accelerate the dissemination of scientific findings to support responses to infectious disease outbreaks.
:: Preprints posted during the Ebola and Zika outbreaks included novel analyses and new data, and most of those that were matched to peer-reviewed publications were available more than 100 days before publication.
:: Despite the advantages of preprints and the endorsement of journals and funders in the context of outbreaks, less than 5% of Ebola and Zika journal articles were posted as preprints prior to publication in journals.
:: With broader adoption by scientists, journals, and funding agencies, preprints can complement peer-reviewed publication and ensure the early, open, and transparent dissemination of science relevant to the prevention and control of disease outbreaks.

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 7 April 2018)
Viewpoints
Safeguarding against Ebola: Vaccines and therapeutics to be stockpiled for future outbreaks

Eric M. Espeland, Chia-Wei Tsai, Joseph Larsen, Gary L. Disbrow
| published 05 Apr 2018 PLOS Neglected Tropical Diseases
https://doi.org/10.1371/journal.pntd.0006275
[See Milestones/Perspectives – Featured Journal Content above for full text]

PLoS One
http://www.plosone.org/
[Accessed 7 April 2018]
Research Article
Case-based surveillance of measles in Sicily during 2012-2017: The changing molecular epidemiology and implications for vaccine strategies
Fabio Tramuto, Carmelo Massimo Maida, Fanny Pojero, Giuseppina Maria Elena Colomba, Alessandra Casuccio, Vincenzo Restivo, Francesco Vitale
| published 04 Apr 2018 PLOS ONE
https://doi.org/10.1371/journal.pone.0195256

Research Article
Innovative technologies and social inequalities in health: A scoping review of the literature
Daniel Weiss, Håvard T. Rydland, Emil Øversveen, Magnus Rom Jensen, Solvor Solhaug, Steinar Krokstad
| published 03 Apr 2018 PLOS ONE
https://doi.org/10.1371/journal.pone.0195447
Abstract
The aim of this study was to systematically review the range, nature, and extent of current research activity exploring the influence of innovative health-related technologies on social inequalities in health, with specific focus on a deeper understanding of the variables used to measure this connection and the pathways leading to the (re)production of inequalities. A review process was conducted, based on scoping review techniques, searching literature published from January 1, 1996 to November 25, 2016 using MEDLINE, Scopus, and ISI web of science. Search, sorting, and data extraction processes were conducted by a team of researchers and experts using a dynamic, reflexive examination process. Of 4139 studies collected from the search process, a total of 33 were included in the final analysis. Results of this study include the classification of technologies based on how these technologies are accessed and used by end users. In addition to the factors and mechanisms that influence unequal access to technologies, the results of this study highlight the importance of variations in use that importantly shape social inequalities in health. Additionally, focus on health care services technologies must be accompanied by investigating emerging technologies influencing healthy lifestyle, genomics, and personalized devices in health. Findings also suggest that choosing one measure of social position over another has important implications for the interpretation of research results. Furthermore, understanding the pathways through which various innovative health technologies reduce or (re)produce social inequalities in health is context dependent. In order to better understand social inequalities in health, these contextual variations draw attention to the need for critical distinctions between technologies based on how these various technologies are accessed and used. The results of this study provide a comprehensive starting point for future research to further investigate how innovative technologies may influence the unequal distribution of health as a human right.

PLoS Pathogens
http://journals.plos.org/plospathogens/
[Accessed 7 April 2018]
Pearls
Polyvalent vaccines: High-maintenance heroes
Barbara Schlingmann, Katelyn R. Castiglia, Christopher C. Stobart, Martin L. Moore
| published 05 Apr 2018 PLOS Pathogens
https://doi.org/10.1371/journal.ppat.1006904

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
[Accessed 7 April 2018]
Impact of the tree prior on estimating clock rates during epidemic outbreaks
Simon Möller, Louis du Plessis and Tanja Stadler
PNAS April 2, 2018. 201713314; published ahead of print April 2, 2018.
https://doi.org/10.1073/pnas.1713314115

Prehospital & Disaster Medicine
Volume 33 - Issue 2 - April 2018
https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue
[Reviewed earlier]

Preventive Medicine
Volume 109 Pages 1-124 (April 2018)
https://www.sciencedirect.com/journal/preventive-medicine/vol/109/suppl/C
Regular Articles
A survey instrument for measuring vaccine acceptance
Original research article
Pages 1-7
Dilshani Sarathchandra, Mark C. Navin, Mark A. Largent, Aaron M. McCright
Abstract
Accurately measuring vaccine acceptance is important, especially under current conditions in which misinformation may increase public anxiety about vaccines and politicize vaccination policies. We integrated substantive knowledge, conceptualization and measurement expertise, and survey design principles to develop an instrument for measuring vaccine acceptance across the general public. Given this broad goal, we expect our novel instrument will complement, rather than replace, existing instruments designed specifically to measure parents' vaccine hesitancy. Our instrument measures five key facets of vaccine acceptance: (1) perceived safety of vaccines; (2) perceived effectiveness and necessity of vaccines; (3) acceptance of the selection and scheduling of vaccines; (4) positive values and affect toward vaccines; and (5) perceived legitimacy of authorities to require vaccinations. We report results of analyses

demonstrating the reliability and validity of this instrument. High Cronbach's alpha values for five sub-scales and for the full scale indicate the instrument's reliability, and the consistent performance of expected predictors (i.e., trust in biologists, conspiratorial ideation, and political ideology) demonstrates the instrument's construct validity. Further, scientific reasoning increases vaccine acceptance among liberals but decreases vaccine acceptance among conservatives, which is consistent with motivated cognition. Also, trust in biologists has a stronger positive effect on vaccine acceptance among conservatives than among liberals, signaling a potentially promising means to reduce political polarization on vaccines and increase vaccine acceptance across the general public. We end by identifying key ways that public health researchers, science studies scholars, and health practitioners may employ the full (or short) version of our vaccine acceptance instrument.

Service quality and parents' willingness to get adolescents HPV vaccine from pharmacists
Original research article
Pages 106-112
Parth D. Shah, William A. Calo, Macary W. Marciniak, Carol E. Golin, ... Noel T. Brewer
Abstract
We sought to examine whether pharmacy service quality was associated with parents' willingness to have immunizing pharmacists administer human papillomavirus (HPV) vaccine to their adolescent children. Participants were a national sample of 1504 US parents of adolescents ages 11 to 17 who completed an online survey in 2014. Analyses used structural equation modeling. Parents rated service quality and feelings of satisfaction with their pharmacies as moderate to high. Many (44%) were willing to get HPV vaccine from immunizing pharmacists for their adolescent children. Compared with parents who went to chain pharmacies, parents who went to independent pharmacies gave higher ratings of service quality (professionalism, confidentiality, milieu, all $p < .001$). Parents who went to clinic pharmacies, compared with parents who went to chain pharmacies gave lower ratings for milieu ($p < .01$). Parents who went to independent pharmacies had lower willingness to get HPV vaccine from pharmacists compared to parents who went to chain pharmacies ($p = .001$), but there was no difference in willingness for parents who went to clinic versus chain pharmacies. Service quality and satisfaction partially mediated the effect between independent pharmacies compared to chain pharmacies and willingness ($p < .05$). Parents who knew their pharmacists or expressed more confidence in HPV vaccine also had higher willingness to get their children HPV vaccine from pharmacist. Many parents were willing to go to immunizing pharmacists for their children's HPV vaccination. Pharmacies that are considering offering HPV vaccine may be able to improve vaccine uptake by increasing perception of service quality.

Proceedings of the Royal Society B
10 January 2018; volume 285, issue 1870
http://rspb.royalsocietypublishing.org/content/285/1870?current-issue=y
[Reviewed earlier]

Public Health
April 2018 Volume 157, p1-152
http://www.publichealthjrnl.com/current

[Reviewed earlier]

Public Health Ethics
Volume 11, Issue 1, 1 April 2018
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Public Health Reports
Volume 133, Issue 2, March/April 2018
http://phr.sagepub.com/content/current
[New issue; No digest content identified]

Qualitative Health Research
Volume 28, Issue 5, April 2018
http://qhr.sagepub.com/content/current
[New issue; No digest content identified]

Research Ethics
Volume 13, Issue 3-4, July-October 2017
http://journals.sagepub.com/toc/reab/current
[Reviewed earlier]

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 7 April 2018]
[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
[Reviewed earlier]

Risk Analysis
March 2018 Volume 38, Issue 3 Pages 427–634
http://onlinelibrary.wiley.com/doi/10.1111/risa.2018.38.issue-3/issuetoc
[Reviewed earlier]

Risk Management and Healthcare Policy
Volume 10, 2017
https://www.dovepress.com/risk-management-and-healthcare-policy-archive56

[Reviewed earlier]

Science
06 April 2018 Vol 360, Issue 6384
http://www.sciencemag.org/current.dtl
[New issue; No digest content identified]

Science Translational Medicine
04 April 2018 Vol 10, Issue 435
http://stm.sciencemag.org/
[New issue; No digest content identified]

Social Science & Medicine
Volume 202 Pages 1-178 (April 2018)
https://www.sciencedirect.com/journal/social-science-and-medicine/vol/202/suppl/C
[Reviewed earlier]

Systematic Reviews
https://systematicreviewsjournal.biomedcentral.com/articles
[Accessed 7 April 2018]
[No new digest content identified]

Travel Medicine and Infectious Diseases
January-February, 2018 Volume 21
http://www.travelmedicinejournal.com/
[Reviewed earlier]

Tropical Medicine & International Health
Volume 23, Issue 3 Pages: i-iv, 251-340 March 2018
https://onlinelibrary.wiley.com/toc/13653156/current
[Reviewed earlier]

Vaccine
Volume 36, Issue 17 Pages 2227-2384 (19 April 2018)
https://www.sciencedirect.com/journal/vaccine/vol/36/issue/17
Short communication
The future control of rotavirus disease: Can live oral vaccines alone solve the rotavirus problem?
Pages 2233-2236
Roger I. Glass, Baoming Jiang, Umesh Parashar
Abstract

Live oral rotavirus (RV) vaccines used worldwide are most effective in reducing diarrheal hospitalizations from RV in high income countries and least effective in low income countries where RV remains a prime cause of death in children. Research has failed to fully explain the reason for this difference of efficacy for RV vaccines, an observation made with other live oral vaccines for polio, cholera and typhoid fever. Use of parenteral vaccines have been successful in overcoming this problem for both polio and typhoid and parenteral RV vaccines are now in development. This approach should be pursued for rotavirus vaccine as well because in low income countries where oral RV vaccines have been introduced and are only partially effective, RV remains the most common cause of diarrhea in children under 5 years. The ultimate control of RV diarrheal will likely require both oral and parenteral vaccines.

Reviews

A review of recommendations for rotavirus vaccination in Europe: Arguments for change

Open access - Review article
Pages 2243-2253
Dirk Poelaert, Priya Pereira, Robert Gardner, Baudouin Standaert, Bernd Benninghoff

A bibliometric analysis of systematic reviews on vaccines and immunisation

Open access - Review article
Pages 2254-2261
Silke Fernandes, Mark Jit, Fiammetta Bozzani, Ulla K. Griffiths, ... Helen E.D. Burchett

Abstract

Introduction

SYSVAC is an online bibliographic database of systematic reviews and systematic review protocols on vaccines and immunisation compiled by the London School of Hygiene & Tropical Medicine and hosted by the World Health Organization (WHO) through their National Immunization Technical Advisory Groups (NITAG) resource centre (www.nitag-resource.org). Here the development of the database and a bibliometric review of its content is presented, describing trends in the publication of policy-relevant systematic reviews on vaccines and immunisation from 2008 to 2016.

Materials and methods

Searches were conducted in seven scientific databases according to a standardized search protocol, initially in 2014 with the most recent update in January 2017. Abstracts and titles were screened according to specific inclusion criteria. All included publications were coded into relevant categories based on a standardized protocol and subsequently analysed to look at trends in time, topic, area of focus, population and geographic location.

Results

After screening for inclusion criteria, 1285 systematic reviews were included in the database. While in 2008 there were only 34 systematic reviews on a vaccine-related topic, this increased to 322 in 2016. The most frequent pathogens/diseases studied were influenza, human papillomavirus and pneumococcus. There were several areas of duplication and overlap.

Discussion

As more systematic reviews are published it becomes increasingly time-consuming for decision-makers to identify relevant information among the ever-increasing volume available. The risk of duplication also increases, particularly given the current lack of coordination of systematic reviews on vaccine-related questions, both in terms of their commissioning and their execution.

The SYSVAC database offers an accessible catalogue of vaccine-relevant systematic reviews with, where possible access or a link to the full-text.
Conclusions
SYSVAC provides a freely searchable platform to identify existing vaccine-policy-relevant systematic reviews. Systematic reviews will need to be assessed adequately for each specific question and quality.

Regular papers

Long-term immunity to hepatitis B following vaccination in infancy: Real-world data analysis

Original research article
Pages 2288-2292
Gil Klinger, Gabriel Chodick, Itzhak Levy

Abstract
Background
Hepatitis B virus (HBV) vaccination has decreased the prevalence of chronic HBV infections and their sequelae. However, whether vaccination at birth provides lifelong protection is unclear.
Objective
To assess long-term immunity following neonatal HBV immunization in a large population-based cohort.
Methods
Using the database of a 2 million member sick fund in Israel, we identified all subjects born after introduction of universal HBV vaccination in Israel (January 1992 through December 2014), that were tested for hepatitis B surface antibody (anti-HBs Ab's). Years since vaccination were categorized into 5-year groups and linear trends in the seroprevalence of HBV immunity were calculated. Anamnestic response and presence of Hepatitis B surface antigen (HBs Ag) were assessed.
Results
Included were 20,634 tested individuals. Mean (±SD) age at testing was 14.8 (±5.4) years. Mean anti-HBs Ab levels declined with time to 16.39 mIU/ml in the 15–20 year group ($P < 0.001$). The proportion of negative results increased gradually ($P < 0.001$) to 66.7% after 15 years. Anamnestic response assessment showed that 604 of 644 seronegative subjects (93.8%, 95% CI: 91.6–95.5%) became seropositive after a booster dose. HBs Ag was identified in 91 of the 20,634 (4.4 per 1000 study participants).
Conclusions
Following vaccination, anti-HB's Ab's progressively decline, with only a third of the population retaining protective levels after 15 years. In adolescence, anamnestic response shows that nearly all revaccinated adolescents exhibit immunity. A low rate of Hepatitis B infection was demonstrated despite vaccination of nearly all newborns.

Knowledge, attitudes, and practices regarding hepatitis B vaccination among hospital-based doctors and nurses in China: Results of a multi-site survey

Original research article
Pages 2307-2313
Yan Liu, Chao Ma, Haimei Jia, Erping Xu, ... Lixin Hao

A multi-country study of dengue vaccination strategies with Dengvaxia and a future vaccine candidate in three dengue-endemic countries: Vietnam, Thailand, and Colombia

Original research article
Pages 2346-2355
Jung-Seok Lee, José Lourenço, Sunetra Gupta, Andrew Farlow

Abstract

Background

The dengue vaccination era began when Dengvaxia (CYD-TDV) became available in 2016. In addition, several second-generation vaccine candidates are currently in phase 3 trials, suggesting that a broader availability of dengue vaccines may be possible in the near future. Advancing on the recent WHO-SAGE recommendations for the safe and effective use of CYD-TDV at the regional level on average, this study investigates the vaccination impacts and cost-effectiveness of CYD-TDV and of a hypothetical new vaccine candidate (NVC) in a country-specific manner for three endemic countries: Vietnam, Thailand, and Colombia.

Methods

The vaccination impacts of CYD-TDV and NVC were derived by fitting the empirical seroprevalence rates of 9 year olds into an individual-based meta-population transmission model, previously used for the WHO-SAGE working group. The disability-adjusted life years were estimated by applying country-specific parametric values. The cost-effectiveness analyses of four intervention strategies in combination with routine and catch-up campaigns were compared for both vaccines to inform decision makers regarding the most suitable immunization program in each of the three countries.

Results and conclusion

Both CYD-TDV and NVC could be cost-effective at the DALY threshold cost of $2000 depending upon vaccination costs. With CYD-TDV, targeting 9 year olds in routine vaccination programs and 10–29 year olds as a one-off catch-up campaign was the most cost-effective strategy in all three countries. With NVC, while the most cost-effective strategy was to vaccinate 9–29 and 9–18 year olds in Vietnam and Thailand respectively, vaccinating younger age cohorts between 1 and 5 years old in Colombia was more cost-effective than other strategies. Given that three countries will soon face decisions regarding whether and how to incorporate CYD-TDV or future dengue vaccines into their budget-constrained national immunization programs, the current study outcomes can be used to help decision makers understand the expected impacts and cost-effectiveness of such vaccines.

Vaccine: Development and Therapy

https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 7 April 2018)
[No new digest content identified]

Vaccines — Open Access Journal

http://www.mdpi.com/journal/vaccines
(Accessed 7 April 2018)
Open Access
Feature Paper Review

New Kids on the Block: RNA-Based Influenza Virus Vaccines

by Francesco Berlanda Scorza and Norbert Pardi
Vaccines 2018, 6(2), 20; doi:10.3390/vaccines6020020 - 1 April 2018
Abstract
RNA-based immunization strategies have emerged as promising alternatives to conventional vaccine approaches. A substantial body of published work demonstrates that RNA vaccines can elicit potent, protective immune responses against various pathogens. Consonant with its huge impact on public health, influenza virus is one of the best studied targets of RNA vaccine research. Currently licensed influenza vaccines show variable levels of protection against seasonal influenza virus strains but are inadequate against drifted and pandemic viruses. In recent years, several types of RNA vaccines demonstrated efficacy against influenza virus infections in preclinical models. Additionally, comparative studies demonstrated the superiority of some RNA vaccines over the currently used inactivated influenza virus vaccines in animal models. Based on these promising preclinical results, clinical trials have been initiated and should provide valuable information about the translatability of the impressive preclinical data to humans. This review briefly describes RNA-based vaccination strategies, summarizes published preclinical and clinical data, highlights the roadblocks that need to be overcome for clinical applications, discusses the landscape of industrial development, and shares the authors' personal perspectives about the future of RNA-based influenza virus vaccines

Value in Health
March 2018 Volume 21, Issue 3, p249-372
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

* * * *

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

Psychological Science in the Public Interest
First Published April 3, 2018
Research Article
Increasing Vaccination: Putting Psychological Science Into Action
Noel T. Brewer, Gretchen B. Chapman, Alexander J. Rothman, ...
Abstract
Vaccination is one of the great achievements of the 20th century, yet persistent public-health problems include inadequate, delayed, and unstable vaccination uptake. Psychology offers three general propositions for understanding and intervening to increase uptake where vaccines are available and affordable. The first proposition is that thoughts and feelings can motivate getting vaccinated. Hundreds of studies have shown that risk beliefs and anticipated regret about infectious disease correlate reliably with getting vaccinated; low confidence in vaccine effectiveness and concern about safety correlate reliably with not getting vaccinated. We were surprised to find that few randomized trials have successfully changed what people think and feel about vaccines, and those few that succeeded were minimally effective in increasing uptake. The second proposition is that social processes can motivate getting vaccinated.

Substantial research has shown that social norms are associated with vaccination, but few interventions examined whether normative messages increase vaccination uptake. Many experimental studies have relied on hypothetical scenarios to demonstrate that altruism and free riding (i.e., taking advantage of the protection provided by others) can affect intended behavior, but few randomized trials have tested strategies to change social processes to increase vaccination uptake. The third proposition is that interventions can facilitate vaccination directly by leveraging, but not trying to change, what people think and feel. These interventions are by far the most plentiful and effective in the literature. To increase vaccine uptake, these interventions build on existing favorable intentions by facilitating action (through reminders, prompts, and primes) and reducing barriers (through logistics and healthy defaults); these interventions also shape behavior (through incentives, sanctions, and requirements). Although identification of principles for changing thoughts and feelings to motivate vaccination is a work in progress, psychological principles can now inform the design of systems and policies to directly facilitate action.

International Journal of Current Microbiology and Applied Sciences
Volume 7 Number 03 (2018)
Original Research Article
Knowledge and Awareness of Cervical Cancer, Human Papillomavirus (HPV), and HPV Vaccine among Screening Women: A Cross-Sectional Study from a Tertiary Care Hospital in South India
P Arumugam, S Habeebullah, SC Parija
Abstract
Even though cervical cancer is quite a common cancer in India, there are limited studies on the knowledge and awareness about the disease. It is important to assess the knowledge among the screening populations have about cervical cancer and Human papillomavirus (HPV) and their attitudes toward HPV vaccination, as it will directly influence their decision-making for the acceptability of healthcare programs. Public education and awareness about HPV infection, HPV vaccination programs are pertinent for a successful cervical cancer screening program available in the country. Our present study was designed to assess the level of knowledge and awareness about cervical cancer, HPV, and the HPV vaccine among screening women in tertiary care hospital, Puducherry. Qualitative data were collected from screening population through in-depth interviews in the Gynecological Outpatient Department at JIPMER, a tertiary care hospital in India during July 2013 – Aug 2014. A total of 152 women were recruited and asked to participate in a questionnaire-based interview that collected qualitative data about their awareness and knowledge about: (1) cervical cancer, (2) Human papillomavirus and (3) HPV vaccine. The study was approved by the institutional ethics committee. Written informed consent was taken from the women who were enrolled in this study.

Health Promotion Practice
First Published March 29, 2018
HPV Knowledge and Vaccine Initiation Among Mexican-Born Farmworkers in North Carolina
KF Furgurson, JC Sandberg, FC Hsu, DC Mora…
Abstract

The human papilloma virus (HPV) vaccine is an effective but underused cancer prevention tool. This study assessed knowledge of HPV and HPV vaccine initiation among Mexican-born farmworkers in North Carolina. Interviewer-administered questionnaires were conducted with 100 Latino farmworkers and 100 nonfarmworker Latino North Carolina residents in 2015 as part of an ongoing community-based participatory research project. Farmworkers had low levels of knowledge about HPV and the HPV vaccine. They had a similar amount of HPV and HPV vaccine knowledge compared to nonfarmworkers. Farmworkers and nonfarmworkers learned about the HPV vaccine from different sources. Adolescent children of farmworkers and nonfarmworkers had low HPV vaccine initiation. However, for children living in the United States with farmworker parents, vaccine initiation was high. To prevent HPV-related cancers and improve health equity, interventions are needed in order to increase HPV education and vaccine initiation among children of Mexican-born farmworkers and nonfarmworkers. Public health programs should look for partners outside the traditional health care setting to reach underserved populations. Other key strategies include promoting catch-up vaccines, improving patient–provider communication, and providing case management services.

* * * *

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 7 April 2018
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 7 April 2018
[No new, unique, relevant content]

The Economist
http://www.economist.com/
Accessed 7 April 2018
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
Accessed 7 April 2018
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 7 April 2018
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 7 April 2018
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 7 April 2018
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 7 April 2018
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 7 April 2018
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 7 April 2018
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 7 April 2018
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 7 April 2018
People can't be educated into vaccinations, but behavioural nudges help, study finds
4 April 2018
Vaccines were one of the great inventions of modern history. They helped stop America's polio epidemic in the 1950s, when it was paralyzing thousands and killing at least 3,000 a year.

They have prevented the deaths of millions worldwide from diseases such as diphtheria, smallpox, measles and tetanus. And yet many people are reluctant to get their shots or vaccinate their children. A study published Wednesday concludes that using education campaigns, and simply trying to persuade people to get the shots, is far less effective than using indirect behavioral nudges.
[See Google Scholar section above for full abstract]

* * * *

Think Tanks et al

Brookings
http://www.brookings.edu/
Accessed 7 April 2018
TechTank
Less than four percent of private investment in health R&D targets the developing world
Liz Sablich
Friday, April 6, 2018
A recent report published by the Brookings Private Sector Global Health R&D Project found that the private sector devotes at least $159.9 billion to investments related to health research and development (R&D) annually. That total includes $156.7 billion from pharmaceutical companies and $3.2 billion from venture capital firms, and encompasses investments focused on both the developed and developing world. But when the researchers further broke out the spending, they found that an exceedingly small share was dedicated to the developing world…

Center for Global Development
http://www.cgdev.org/page/press-center
Accessed 7 April 2018
[No new relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 7 April 2018
[No new relevant content]

CSIS
https://www.csis.org/
Accessed 7 April 2018
Publication
A Ripe Moment for Reducing Vaccine-Preventable Disease
In her latest commentary, my colleague Nellie Bristol, Global Health Policy Center Senior Fellow, discusses the threat that decreased U.S. foreign assistance will have on the vast strides made in strengthening immunizations systems globally. Over the next several years, three global health activities could result in sustained increases in global vaccination rates and amplify U.S. investments in vaccine promotion mechanisms: immunization surveillance goals outlined in the Global Health Security Agenda; worldwide delivery of the inactivated polio vaccine; and polio transition, which involves the repurposing of polio infrastructure for other health activities.

However, an uncertain budget future for these three activities threatens the expansion of this global public good. Nellie provides policy recommendations for the U.S. government that would ensure that the United States remains a leader in global health and pushes forward proven disease prevention interventions that will protect Americans at home and abroad.

* * * *
* * * *

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

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

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

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

* * * *
* * * *