

Vaccines and Global Health: The Week in Review 18 March 2017 Center for Vaccine Ethics & Policy (CVEP)

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

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

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

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Milestones :: Perspectives :: Featured Journal Content

WHO: <u>6 years into the conflict, hero vaccinators in northern Syria brave danger to protect children from disease</u>

15-03-2017

This month marks a tragic milestone: 6 years since the conflict began in the Syrian Arab Republic. This ongoing crisis has led to 5 million refugees, more than 6 million internally displaced people and 13.5 million people in need within the country.

A number of WHO partners in the north of the country collectively form what is known as the <u>Syria Immunization Group (SIG)</u>, an immunization cluster coordinated by WHO staff in the field office in Gaziantep, Turkey. The work of this group is carried out under what is known as the "whole-of-Syria" approach, which brings together humanitarian actors both within the country and from neighbouring countries to provide access to health services across lines and borders.

The SIG is made up of individuals who often put their own lives at risk to bring vaccines to children in hard-to-reach and besieged areas. These courageous health workers take boats when bridges are destroyed. They walk through farmland carrying coolers of vaccines. They provide vaccinations to communities while bombs fall nearby. They brave tremendous danger to protect children from deadly diseases.

<u>Read the stories</u> representing just a few of the many hero vaccinators working in partnership with WHO to keep children in northern Syria safe from vaccine-preventable diseases...

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The Lancet

Mar 18, 2017 Volume 389 Number 10074 p1075-1164 http://www.thelancet.com/journals/lancet/issue/current Editorial

Syria suffers as the world watches

The Lancet

March 15, 2017, marks the sixth anniversary of the civil war in Syria, a conflict perhaps unprecedented in its apparently shameless disregard for international law. The world has stood by in horror, watching the death toll rise and the humanitarian and refugee crises spread their indelible stain on the world map and human history. The Syrian conflict has been marked on the one hand by immense suffering and on the other by a stunning lack of adequate condemnation or action from governments, international agencies, or the medical community.

The first output from the Syria Commission launched jointly by The Lancet and the American University in Beirut (AUB) shows the credibility, urgency, and importance of the Commission's work. Detailing events in both government-controlled and non-government-controlled areas, the article strengthens the concept of the weaponisation of health: the targeting of health workers and facilities as a weapon of war. The strongest independent analysis of the Syrian health worker crisis published so far, it collates data from multiple sources in a compelling four-part analytical approach, analysing the formidable challenges health-care workers in Syria face now and in the future, and carefully offering policy options and lessons for public debate.

2 weeks ago, the UN published its Inquiry on the Syrian Arab Republic, finding that multiple war crimes had been committed by both sides. Powerful in its concentrated nature, the <u>report</u> dispassionately describes deliberate attacks on schools, hospitals, markets, water supplies, humanitarian relief personnel, and civilians; use of civilians as human shields; arbitrary arrests, forced conscription, reprisal executions, and forced displacement; withholding of humanitarian aid; use of chemical weapons including probable chlorine attacks; and intentional targeting of medical workers, facilities, and transport, including double tap attacks—deliberate targeting of those already harmed. The UN also calls for action, and although some conclusions might not seem feasible, its recommendations to the international community are irrefutable.

Together, these reports highlight grievous failings by the global health community and international governance. Although many medics have shown extraordinary bravery and solidarity in the face of this war, the 6-year conflict has been marked by insufficient cooperation among health professionals and, as the war has raged, fatigue. Journals too have been guilty of turning away from the conflict to focus on more immediate wins.

This is a moment to think carefully about how we renew our solidarity, particularly as the tectonic plates shift elsewhere in politics. The efforts of the Obama administration to seek a ceasefire and a political process might have been incomplete, but the USA was there. Donald Trump's speeches so far do not instill confidence in the USA's ongoing commitment to resolving the Syrian conflict. The proposed USAID budget cuts will have a more serious impact for Syrians in future development and humanitarian assistance.

At WHO, the focus for the past 12 months has been on the elections, rather than the world's health crises. By their own definition, WHO's commitment to meeting the health needs of Syrians has been inadequate. The summits and intergovernmental meetings organised in the face of Ebola have not been matched by a response to this very different human catastrophe. If the USA is withdrawing from its role as a champion for a peaceful and democratic Syria, it is even more important that multi-lateral organisations step in to fill the vacuum and show leadership. WHO must now focus every effort on supporting the health structure and health workers in Syria, raising the finances needed to meet this challenge, and mobilising international support to resolve the humanitarian crisis in Syria, as they acknowledge in a Comment.

On March 30, the World Bank will host a meeting in Marseille, France, to discuss the integration of Syrian health-care workers into OECD countries. This is also an opportunity for the international community to face up to the situation in Syria and shoulder responsibility. The Syrian civil war, which started as a popular uprising and became a battleground for the great world powers, is not just a Syrian crisis but a global crisis. An entire region and its people have been decimated while the world has watched. For Syria and its neighbouring countries the effects will last lifetimes. Health and development will take decades to catch up with themselves, and it will take generations to survive the loss of lives and livelihoods, structures and infrastructure. The Lancet-AUB Commission is ongoing and is much needed, but it is only a tiny part of the commitment that Syria needs.

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Emergencies

WHO Grade 3 Emergencies [to 18 March 2017]

<u>South Sudan</u> - No new announcements identified

The Syrian Arab Republic

Yemen - No new announcements identified

Iraq - No new announcements identified

Nigeria - No new announcements identified

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WHO Grade 2 Emergencies [to 18 March 2017]

Cameroon - No new announcements identified.

Central African Republic - No new announcements identified.

Democratic Republic of the Congo - No new announcements identified.

Ethiopia - No new announcements identified.

Libya - No new announcements identified.

Myanmar - No new announcements identified.

Niger - No new announcements identified.

Ukraine - No new announcements identified.

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UN OCHA – L3 Emergencies

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

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:: <u>Iraq: Mosul Humanitarian Response Situation Report No. 24 (6 March - 12 March 2017)</u> [EN/KU/AR]

<u>Syria</u>

- :: Syria Operation Overview (February 2017) 18 Mar 2017
- :: Message on Syria 15 Mar 2017 UN Humanitarian Chief
- :: Syrian Arab Republic: Aleppo Situation Report No. 16 (13 March 2017)

Yemen - No new announcements identified.

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Editor's Note:

We present two versions of the important announcement of a new OCV campaign in Somalia – because each presents some unique details and for comparative purposes.

WHO: Oral cholera vaccination campaign launched in Somalia

15 March 2017 – The Government of Somalia has launched an oral cholera vaccination (OCV) campaign today with the support of WHO, targeting over 450 000 people in 7 high-risk areas around the country. It is the first OCV campaign to be conducted in the country, and comes at

a critical time after Somalia announced the ongoing drought as a national disaster and faces the possibility of another famine.

The campaign is being held in select communities in Mogadishu, Kismayo and Beledweyne through a combination of fixed and mobile sites for maximum accessibility by the communities. The vaccines, which will be administered to at-risk persons aged one year or older, are being delivered in 2 rounds. The first round of the campaign has commenced today and will continue until 19 March, and the second round of the campaign will be held from 18 to 22 April.

"This is one of the largest oral cholera vaccination campaigns conducted in Africa," said Dr Ghulam Popal, WHO Representative in Somalia. "This vaccination campaign will contribute to the reduction in the number of new cholera cases, interrupt transmission and limit the spread of cholera," he said.

Somalia is currently experiencing a large-scale outbreak of cholera with over 11,000 cases of cholera and 268 deaths (case–fatality rate 2.4%) reported in 11 regions since the beginning of 2017. This is more than half the number of cases reported in total for 2016. The response efforts by the Ministry of Health, WHO, UNICEF and health partners have included active case search, effective case management, intensive household chlorination campaign, and community awareness.

The oral vaccination campaign was preceded by extensive social mobilization efforts to inform the community of the benefits, availability and necessity of the vaccine. Vaccination is a preventive measure against cholera that supplements, but does not replace, other traditional cholera control measures such as improving access to safe water and sanitation and hygiene measures/interventions.

Somalia has long experienced a humanitarian emergency due to conflict, insecurity, displacement of people and limited access to health system. This situation is further compounded by drought, malnutrition and lack of access to clean water and sanitation facilities. If the current drought and food insecurity continue, the number of cholera cases is likely to increase. Preventative measures such as oral cholera vaccine can mitigate these numbers, and save lives.

The vaccination campaign is supported by the Global Task Force on Cholera Control, Gavi the Vaccine Alliance, UNICEF and health partners in its various stages of planning and implementation. WHO is also providing support for the campaign in the areas of planning, organization and monitoring.

Gavi: Cholera vaccination campaign begins in Somalia

Mass vaccination campaign will target over 450,000 people to halt cholera outbreak.

Geneva, 15 March 2017 – A major vaccination campaign to halt the spread of <u>cholera</u> begins in three drought-ravaged regions of Somalia today.

Gavi, the Vaccine Alliance, has delivered 953,000 doses of Oral Cholera Vaccine to the country to protect over 450,000 people from the disease. The campaign will take place in three of the worst-hit regions, Banadir, Kismayo and Beledweyne, with the vaccination being given in

two doses to everyone over the age of one. The first round runs from 15-19 March and the second from 18-22 April.

The vaccines were procured, transported and stored at the appropriate temperature by UNICEF. They will be administered by the Government of Somalia with the support of World Health Organisation (WHO) and UNICEF; while UNICEF and others continue to improve water and sanitation infrastructure and promote behaviour change. As well as providing the vaccines, Gavi has provided US\$550,000 to support the campaign.

Seth Berkley, CEO of Gavi, the Vaccine Alliance, said:

"The people of Somalia are going through unimaginable suffering. After years of conflict, a severe drought has brought the country to the brink of famine and now a suspected cholera outbreak threatens to become a nationwide epidemic. These lifesaving vaccines will play a vital role in slowing the spread of the disease, buying valuable time to put the right water, sanitation and hygiene infrastructure in place to stop the root causes of this outbreak."...

...A vaccination campaign also begins this week in South Sudan. Gavi is delivering 475,000 doses to the country to help halt a cholera outbreak that has reached over 5,500 cases nationwide and claimed over 100 lives. The vaccines will be administered and distributed by MedAir and the World Food Programme (WFP), working with the WHO.

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UNICEF [to 18 March 2017]

https://www.unicef.org/media/media 94367.html

17 March 2017

One year on after EU-Turkey statement the human cost to refugee and migrant children mounts up

GENEVA, 17 March 2017 – One year after the Balkan border closures and the EU-Turkey Statement which were aimed at stopping mass migration flows, refugee and migrant children face greater risks of deportation, detention, exploitation and deprivation, says UNICEF.

Yemen needs urgent assistance to prevent famine - FAO, WFP, UNICEF

15 March 2017, Sana'a/Amman -Severe food insecurity threatens more than 17 million people in conflict-ridden Yemen, according to the latest Integrated Food Security Phase Classification (IPC) analysis released by the United Nations and humanitarian partners today.

Hitting rock bottom: Children's suffering in Syria at its worst - UNICEF

DAMASCUS/AMMAN, 13 March 2017 – Grave violations against children in Syria were the highest on record in 2016, said UNICEF in a grim assessment of the conflict's impact on children, as the war reaches six years.

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POLIO [to 18 March 2017]

Public Health Emergency of International Concern (PHEIC)

Polio this week as of 15 March 2017

:: Summary of newly-reported viruses this week (see country-specific sections below for further details): Pakistan – one WPV1 case, six WPV1 positive environmental samples.

:: <u>Yemen</u> and <u>Syria</u> have both carried out polio immunization campaigns as part of ongoing efforts to protect children affected by conflict.

Country Updates [Selected Excerpts]

New cases or environmental samples reported across the monitored country/region settings: Afganistan, Pakistan, Nigeria, Lake Chad Basin, Guinea and West Africa, Lao People's Democratic Republic.

Pakistan

- :: One new wild poliovirus type 1 (WPV1) case was reported in the past week from Diamir district, Gilgit Baltistan province, with onset of paralysis on 13 February. The total number of WPV1 cases for 2017 is two, and for 2016 remains 20.
- :: Six new WPV1 positive environmental samples were reported in the past week, ranging from Punjab to Sindh and from Islamabad to Khyber Pakhtunkhwa. The most recent is from Killa Adbullah district, Balochistan, with a collection date of 15 February.

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Editor's Note:

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

EBOLA/EVD [to 18 March 2017]

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

No new digest content identified for this edition.

Zika virus [to 18 March 2017]

http://www.who.int/emergencies/zika-virus/en/ No new digest content identified for this edition.

Yellow Fever [to 18 March 2017]

http://www.who.int/emergencies/yellow-fever/en/ No new digest content identified for this edition.

MERS-CoV [to 18 March 2017]

http://www.who.int/emergencies/mers-cov/en/ No new digest content identified for this edition.

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WHO & Regional Offices [to 18 March 2017]

The road to universal health coverage in the Solomon Islands

16 March 2017 – In a nation of 620 000 people dispersed over more than 600 islands, patients travel for days by truck and boat to receive medical care. A bold new plan is

restructuring available health resources, setting out the Pacific nation's roadmap towards universal health coverage while ensuring efficient use of resources at strategic locations.

Health care a casualty of 6 years of war in the Syrian Arab Republic

15 March 2017 –This week the conflict in the Syrian Arab Republic enters its seventh year. Over the past 6 years access to health services for the civilian population in the country has seriously deteriorated.

Highlights

WHO and partners re-open Qayyara Hospital in Mosul with support from ECHO

March 2017 – Five months after Al-Qayyara Hospital was closed due to extensive damage, the facility has been re-opened to provide trauma care and obstetric services to peoples affected by the ongoing conflict.

WHO responds to reported use of chemical weapons agents in East Mosul, Iraq

March 2017 – Following the reported use of chemical weapons agents in East Mosul, Iraq, WHO, partners and local health authorities have activated an emergency response plan to safely treat men, women and children who may be exposed to the highly toxic chemical.

Borno State Reports First Lassa Fever Outbreak in 48 Years

March 2017 – Borno state in northeast Nigeria has recorded its first Lassa fever outbreak in almost five decades. The last confirmed outbreak of the deadly disease was in 1969. WHO is supporting the government to contain the outbreak in an area of the country which is already coping with a humanitarian crisis resulting from years of conflict.

Weekly Epidemiological Record, 17 March 2017, vol. 92, 11 (pp. 117–128)

:: Recommended composition of influenza virus vaccines for use in the 2017–2018 northern hemisphere influenza season

Disease outbreak news

- :: Human infection with avian influenza A(H7N9) virus China 16 March 2017
- :: Human infection with avian influenza A(H7N9) virus China 15 March 2017

:: WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

:: <u>Building the legacy of Ebola: Survivors, health systems, and a blueprint for research and</u> development

This report describes the work done by WHO from January 2015 up to the end of December 2016 to address the long-term issues of survivor care, health-systems strengthening and research. This work would not otherwise have been possible without the foresight and commitment of donors who, having contributed generously to the WHO-led response to the outbreak, recognised the importance of dealing with its consequences.

Ebola Response Report 2016 (2.1 MB)

WHO Region of the Americas PAHO

- No new announcements identified.

WHO South-East Asia Region SEARO

:: <u>South-East Asia countries adopt Call for Action to accelerate efforts to End TB</u> SEAR/PR/1644

New Delhi, 16 March 2017 - Health Ministers from countries in WHO South-East Asia Region which bear half the global TB burden, and WHO today signed a *Call for Action for Ending TB*, pledging to scale-up efforts and implement adequately funded, innovative, multisectoral and comprehensive measures to achieve the global target to end the disease by 2030.

"We need to make ending TB our central priority. The disease continues to be a leading cause of death and lost productive years in the crucial age group of 15-49 years causing catastrophic expenses, financial losses, outright impoverishment of individuals and households and massive aggregate costs to national economies. Ending TB is paramount for health and development across the Region," Dr Poonam Khetrapal Singh, Regional Director for WHO South-East Asia, told the Ministerial Meeting Towards Ending TB in the South-East Asia Region, here...

WHO European Region EURO

- :: Strengthening countries' pharmaceutical systems: a year in review 17-03-2017
- :: <u>6 years into the conflict, hero vaccinators in northern Syria brave danger to protect children from disease</u> 15-03-2017
- :: WHO European Healthy Cities Network adopts the Pécs Declaration 14-03-2017
- :: Regional Director visits Israel to further strengthen collaboration 14-03-2017

WHO Eastern Mediterranean Region EMRO

- :: <u>Health care a casualty of 6 years of war in the Syrian Arab Republic</u> 16 March 2016
- :: Oral cholera vaccination campaign launched in Somalia 15 March 2017
- :: <u>First Joint Ministerial Meeting of the Arab Councils of the Health and the Environment Ministers</u> 12 March 2017

WHO Western Pacific Region

:: The road to universal health coverage in the Solomon Islands	16 March 2017

CDC/ACIP [to 18 March 2017]

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

Media Statement

MONDAY, MARCH 13, 2017

<u>CDC identifies potential risk of Zika virus transmission since June 15, 2016, in Miami-Dade, Broward, and Palm Beach counties</u>

CDC has identified a potential risk of Zika virus transmission starting on June, 15, 2016, to present in Miami-Dade County, Florida, that also could affect risk for residents of Broward and Palm Beach counties.

MMWR Weekly March 17, 2017 / No. 10

[Excerpts]

:: <u>Notes from the Field</u>: Investigation of Patients Testing Positive for Yellow Fever Viral RNA After Vaccination During a Mass Yellow Fever Vaccination Campaign — Angola, 2016

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Announcements

Gavi [to 18 March 2017] http://www.gavi.org/library/news/press-releases/ 15 March 2017

Cholera vaccination campaign begins in Somalia

Mass vaccination campaign will target over 450,000 people to halt cholera outbreak. [See Emergencies above for more detail]

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Global Fund [to 18 March 2017]

http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country= 15 March 2017

Global Fund Receives Top Marks in Performance Review

GENEVA – The Global Fund is an effective multilateral organization that provides strong global leadership for the response to HIV, TB and malaria, a group of leading donor countries said in a review that gave the Global Fund top marks in performance.

The evaluation by the Multilateral Organisation Performance Assessment Network (MOPAN), which monitors the performance of multilateral organizations, gave the Global Fund top ratings in organizational architecture, operating model and financial transparency and accountability.

The assessment is here.

Published today, the assessment noted an overall strong performance by the Global Fund in all 12 of its criteria. Key strengths identified point to the Global Fund's commitment to delivering impact and value for money: clear strategic direction and a proactive approach to innovation and change; results-based budgeting well aligned to strategy within a low operational budget; early identification of operational and financial risks; and vibrant and effective partnerships, particularly those that work with civil society and leverage private sector skills to address operational gaps...

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PATH [to 18 March 2017]

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

Announcement | March 17, 2017

PATH welcomes grant for the collaborative development of solutions for achieving universal health coverage

Award will strengthen and expand the work of the Joint Learning Network for Universal Health Coverage

PATH was awarded \$4M to support the <u>Joint Learning Network for Universal Health Coverage</u> (JLN)—a global community of health policymakers and practitioners working to address barriers to achieving universal health coverage in their countries. This investment by the Bill & Melinda

Gates Foundation will revitalize and expand the technical work of the network, allowing for continued peer-to-peer learning and co-development of solutions that contribute to the goal of extending effective health insurance coverage to more than 3 billion people...

Announcement | March 16, 2017

PATH Statement on the US President's Proposed Federal Budget

Proposed Cuts to Global Health Programs and Research Would Stifle Innovation and Make the World—and America—Less Healthy and Less Secure

March 16, 2017—Today the US Administration sent its proposed budget for fiscal year 2018 to Congress. The budget includes extensive cuts to global health and development programs, including approximately a one-third cut to the Department of State and the US Agency for International Development, as well as cuts to vital research programs funded through the National Institutes of Health and the Centers for Disease Control and Prevention. PATH opposes these cuts and believes they will make the world—and America—less healthy and less secure, while also stifling innovation. A statement from PATH's President and CEO Steve Davis follows:

"Global health and development programs save lives, foster healthier, more prosperous communities, and create a safer, more secure world. The cuts proposed to these programs represent a threat to the health of millions of people around the world—including Americans. At the same time, proposed cuts to scientific research threaten to stifle innovation, which has driven so much of the progress we have seen in the past two decades.

Recent outbreaks of Ebola and Zika made painfully clear that no one is immune to disease outbreaks, and that the world is unprepared for the next threat. It is not a question of if, but when another outbreak will occur, and US government leadership has been instrumental to global efforts to better prevent outbreaks from becoming widespread epidemics. Now is not the time to pull back. Epidemics not only threaten lives, but also cost billions of dollars and disrupt entire economies, when they could be prevented at just a fraction of the cost.

The budget also proposes deep cuts to scientific research, which would not only risk health and safety, but also dampen innovation. Robust research and development efforts are critical to ensure we have tools to tackle the health challenges we face today, and that we are able to quickly respond as new threats emerge. These innovations pay dividends not only in health outcomes, but also as drivers of economic growth. Further, relatively small public-sector investments have the power of catalyzing private-sector engagement, which we have seen at unprecedented levels in recent years. Harnessing the capacity and eagerness of private-sector companies to solve global challenges is essential to tackling complex challenges around the world. These budget cuts will stymie our ability to do so.

Global health and scientific research have historically earned bipartisan support, and we urge Congress to protect these vital programs. There is too much at risk if they do not."

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FDA [to 18 March 2017]

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm What's New for Biologics

:: March 15, 2017 Approval Letter - Zostavax (PDF - 43KB) Posted: 3/17/2017

- :: March 15, 2017 Approval Letter PROQUAD (PDF 34KB) Posted: 3/17/2017
- :: <u>CBER Expanded Access Submission Receipt Reports</u> FY 2016 (October 1, 2015 September 30, 2016); Updated: 3/7/2017
- :: Complete List of Currently Approved NDA and ANDA Application Submissions (PDF 17KB)
- :: Complete List of Currently Approved Premarket Approvals (PMAs) (PDF 16KB)

Posted: 3/16/2017; Updated as of 3/15/2017

:: Complete List of Substantially Equivalent 510(k) Device Applications (PDF - 409KB)

Posted: 3/16/2017; Updated as of 3/15/2017

:: <u>Complete List of Licensed Products and Establishments</u> Posted: 3/16/2017; Updated as of 2/28/2017

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AERAS [to 18 March 2017]

http://www.aeras.org/pressreleases
No new digest content identified.

BIO [to 18 March 2017] https://www.bio.org/insights
No new digest content identified.

BMGF - Gates Foundation [to 18 March 2017]

http://www.gatesfoundation.org/Media-Center/Press-Releases No new digest content identified.

CEPI – Coalition for Epidemic Preparedness Innovations [to 18 March 2017]

http://cepi.net/

No new digest content identified.

DCVMN [to 18 March 2017]

http://www.dcvmn.org/

No new digest content identified

EDCTP [to 18 March 2017]

http://www.edctp.org/

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

European Vaccine Initiative [to 18 March 2017]

http://www.euvaccine.eu/news-events No new digest content identified.

Fondation Merieux [to 18 March 2017]

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

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

No new digest content identified.

GHIT Fund [to 18 March 2017]

https://www.ghitfund.org/

GHIT was set up in 2012 with the aim of developing new tools to tackle infectious diseases that devastate the world's poorest people. Other funders include six Japanese pharmaceutical companies, the Japanese Government and the Bill & Melinda Gates Foundation. No new digest content identified.

Hilleman Laboratories [to 18 March 2017]

http://www.hillemanlabs.org/ No new digest content identified.

Human Vaccines Project [to 18 March 2017]

http://www.humanvaccinesproject.org/media/press-releases/ No new digest content identified.

IAVI – International AIDS Vaccine Initiative [to 18 March 2017]

https://www.iavi.org/
No new digest content identified.

IFPMA [to 18 March 2017]

http://www.ifpma.org/resources/news-releases/ No new digest content identified.

IVI [to 18 March 2017]

http://www.ivi.int/

No new digest content identified.

NIH [to 18 March 2017]

http://www.nih.gov/news-events/news-releases
No new digest content identified.

PhRMA [to 18 March 2017]

http://www.phrma.org/press-room No new digest content identified.

Sabin Vaccine Institute [to 18 March 2017]

http://www.sabin.org/updates/pressreleases No new digest content identified.

UNAIDS [to 18 March 2017]

http://www.unaids.org/

No new digest content identified.

Wellcome Trust [to 18 March 2017]

<u>Reports/Research/Analysis/Commentary/Conferences/Meetings/Book</u> <u>Watch/Tenders</u>

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

No new content identified

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Journal Watch

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

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

American Journal of Infection Control

March 01, 2017 Volume 45, Issue 3, p215-340, e34-e44 http://www.ajicjournal.org/current Major Articles [Reviewed earlier]

American Journal of Preventive Medicine

March 2017 Volume 52, Issue 3, p263-416, e67-e94 http://www.ajpmonline.org/current [Reviewed earlier]

American Journal of Public Health

Volume 107, Issue 3 (March 2017) http://ajph.aphapublications.org/toc/ajph/current [Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

Volume 96, Issue 3, 2017 http://www.ajtmh.org/content/current [Reviewed earlier]

Annals of Internal Medicine

7 March 2017 Vol: 166, Issue 5 http://annals.org/issue.aspx [Reviewed earlier]

BMC Cost Effectiveness and Resource Allocation

http://resource-allocation.biomedcentral.com/ (Accessed 18 March 2017) [No new content]

BMJ Global Health

January 2017; volume 2, issue 1 http://gh.bmj.com/content/2/1?current-issue=y [Reviewed earlier]

BMC Health Services Research

http://www.biomedcentral.com/bmchealthservres/content (Accessed 18 March 2017)
[No new digest content identified]

BMC Infectious Diseases

http://www.biomedcentral.com/bmcinfectdis/content (Accessed 18 March 2017) [No new digest content identified]

BMC Medical Ethics

http://www.biomedcentral.com/bmcmedethics/content (Accessed 18 March 2017) [No new content]

BMC Medicine

http://www.biomedcentral.com/bmcmed/content (Accessed 18 March 2017) [No new digest content identified]

BMC Pregnancy and Childbirth

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 18 March 2017) [No new digest content identified]

BMC Public Health

http://bmcpublichealth.biomedcentral.com/articles

(Accessed 18 March 2017)

Research article

<u>Women's intention to screen and willingness to vaccinate their daughters against cervical cancer – a cross sectional study in eastern Uganda</u>

Rawlance Ndejjo, Trasias Mukama, Geofrey Musinguzi, Abdullah Ali Halage, John C. Ssempebwa and David Musoke

BMC Public Health 2017 17:255 Published on: 14 March 2017

Abstract Background

The World Health Organization recommends cervical cancer screening and vaccination programmes as measures to combat cervical cancer. The uptake of these measures remains low in Uganda, most especially in rural areas. An understanding of the factors that influence women's decision to attend screening, and willingness to have their daughters vaccinated against cervical cancer is essential for any attempts to increase uptake of these services. This study assessed the factors associated with intention to screen for cervical cancer among women in eastern Uganda, and willingness to have their daughters vaccinated against the disease. Methods

This cross sectional study involved 900 females aged 25 to 49 years in Bugiri and Mayuge districts in eastern Uganda. Data were collected using a pretested semi-structured questionnaire, entered in Epidata version 3.02 and analysed in STATA version 12.0. Unadjusted and adjusted prevalence ratios (PR) were computed using a generalized linear model with Poisson family, and a log link with robust standard errors.

Results

Majority 819 (91.0%) of respondents stated that they intended to go for cervical cancer screening in the subsequent six months. Among them, 603 (73.6%) wanted to know their status, 256 (31.3%) thought it was important, 202 (24.7%) wanted to reduce their chances of getting the disease, and 20 (2.4%) had been told to do so by a health worker. Majority 813 (90.4%) of respondents were willing to vaccinate their daughters against cervical cancer. Higher income (adjusted PR = 1.11, 95% CI: 1.03-1.20), cervical cancer screening status (adjusted PR = 0.81, 95% CI: 0.67-0.99) and knowledge of at least one test for cervical cancer (adjusted PR = 0.92, 95% CI: 0.85-0.98) were significantly associated with intention to screen for cervical cancer. No socio-demographic characteristic was associated with willingness to vaccinate daughters among women.

Conclusion

There is a very high intention to screen and willingness to vaccinate daughters against cervical cancer among women in eastern Uganda. To take advantage of this, there is need to avail opportunities for women to access cervical cancer screening and vaccinations particularly among rural communities.

Research article

<u>School-based vaccination programmes: a systematic review of the evidence on organisation and delivery in high income countries</u>

Sarah Perman, Simon Turner, Angus I. G. Ramsay, Abigail Baim-Lance, Martin Utley and Naomi J. Fulop

BMC Public Health 2017 17:252 Published on: 14 March 2017

Abstract Background

Many countries have recently expanded their childhood immunisation programmes. Schools are an increasingly attractive setting for delivery of these new immunisations because of their ability to reach large numbers of children in a short period of time. However, there are organisational challenges to delivery of large-scale vaccination programmes in schools. Understanding the facilitators and barriers is important for improving the delivery of future school-based vaccination programmes.

Methods

We undertook a systematic review of evidence on school-based vaccination programmes in order to understand the influence of organisational factors on the delivery of programmes. Our eligibility criteria were studies that (1) focused on childhood or adolescent vaccination programmes delivered in schools; (2) considered organisational factors that influenced the preparation or delivery of programmes; (3) were conducted in a developed or high-income country; and (4) had been peer reviewed. We searched for articles published in English between 2000 and 2015 using MEDLINE and HMIC electronic databases. Additional studies were identified by searching the Cochrane Library and bibliographies. We extracted data from the studies, assessed quality and the risk of bias, and categorised findings using a thematic framework of eight organisational factors.

Results

We found that most of the recent published literature is from the United States and is concerned with the delivery of pandemic or seasonal flu vaccination programmes at a regional (state) or local level. We found that the literature is largely descriptive and not informed by the use of theory. Despite this, we identified common factors that influence the implementation of programmes. These factors included programme leadership and governance, organisational models and institutional relationships, workforce capacity and roles particularly concerning the school nurse, communication with parents and students, including methods for obtaining consent, and clinic organisation and delivery.

Conclusions

This is the first time that information has been brought together on the organisational factors influencing the delivery of vaccination programmes in school-based settings. An understanding of these factors, underpinned by robust theory-informed research, may help policy-makers and managers design and deliver better programmes. We identified several gaps in the research literature to propose a future research agenda, informed by theories of implementation and organisational change.

BMC Research Notes

http://www.biomedcentral.com/bmcresnotes/content (Accessed 18 March 2017)

[No new digest content identified]

BMJ Open

March 2017 - Volume 7 - 3 http://bmjopen.bmj.com/content/current [Reviewed earlier]

Bulletin of the World Health Organization

Volume 95, Number 3, March 2017, 165-240 http://www.who.int/bulletin/volumes/95/3/en/ [Reviewed earlier]

Child Care, Health and Development

March 2017 Volume 43, Issue 2 Pages 161–321 http://onlinelibrary.wiley.com/doi/10.1111/cch.v43.2/issuetoc [Reviewed earlier]

Clinical and Experimental Vaccine Research

2017 Jan;6(1):31-37. English. http://ecevr.org/
[Reviewed earlier]

Clinical Therapeutics

February 2017 Volume 39, Issue 2, p231-450 http://www.clinicaltherapeutics.com/issue/S0149-2918(17)X0002-7 [Reviewed earlier]

Complexity

November/December 2016 Volume 21, Issue S2 Pages 1–642 http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.S2/issuetoc [Reviewed earlier]

Conflict and Health

http://www.conflictandhealth.com/ [Accessed 18 March 2017] [No new content]

Contemporary Clinical Trials

Volume 54, Pages 1-108 (March 2017) http://www.sciencedirect.com/science/journal/15517144/54 [New issue; No relevant content identified]

Current Opinion in Infectious Diseases

April 2017 - Volume 30 - Issue 2 http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx [Reviewed earlier]

Developing World Bioethics

April 2017 Volume 17, Issue 1 Pages 1–60 http://onlinelibrary.wiley.com/doi/10.1111/dewb.2017.17.issue-1/issuetoc [Reviewed earlier]

Development in Practice

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

Disasters

April 2017 Volume 41, Issue 2 Pages 209–426 http://onlinelibrary.wiley.com/doi/10.1111/disa.2017.41.issue-2/issuetoc [Reviewed earlier]

EMBO Reports

Volume 18, Issue 3, 2017 http://embor.embopress.org/front.current-issue [Reviewed earlier]

Emerging Infectious Diseases

Volume 23, Number 3—March 2017 http://wwwnc.cdc.gov/eid/ [Reviewed earlier]

Epidemics

Volume 18, Pages 1-112 (March 2017)
http://www.sciencedirect.com/science/journal/17554365

**Multi-model comparisons for neglected tropical diseases - validation and projection Edited by Déirdre Hollingsworth and Graham Medley [Reviewed earlier]

Epidemiology and Infection

Volume 145 - Issue 4 - March 2017 https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue [Reviewed earlier]

The European Journal of Public Health

Volume 27, Issue 1, 1 February 2017 https://academic.oup.com/eurpub/issue/27/1 [Reviewed earlier]

Global Health Action

Volume 9, 2016 - Issue 1 http://www.tandfonline.com/toc/zgha20/9/1 [Reviewed earlier]

Global Health: Science and Practice (GHSP)

December 2016 | Volume 4 | Issue 4 http://www.ghspjournal.org/content/current [Reviewed earlier]

Global Public Health

Volume 12, 2017 Issue 5 http://www.tandfonline.com/toc/rgph20/current Article

<u>Evaluation of a pilot intervention to redesign the decentralised vaccine supply chain</u> system in Nigeria

Pages: 601-616

Published online: 24 Feb 2017

Shola Molemodile, Maruchi Wotogbe & Seye Abimbola

ABSTRACT

Responsibility for immunisation in Nigeria is decentralised to sub-national governments. So far, they have failed to achieve optimal coverage for their populations. We evaluated a pilot intervention implemented between 2013 and 2014 to redesign a vaccine supply chain management system in Kano, Nigeria. The intervention included financing immunisation services from a designated pool of government and donor funds, a visibility tool to track vaccine stock, and a private vendor engaged to deliver vaccines directly to health facilities. The number of local government areas within the state with adequate vaccine stock increased from 21% to 98% after 10 months. To understand how the intervention achieved this outcome, we analysed immunisation coverage for the period and interviewed 18 respondents across different levels of government. We found that the intervention worked by improving ownership and accountability for immunisation by sub-national governments and their capacity for generating resources and management (of data and the supply chain). While the intervention focused on improving immunisation coverage, we identified gaps in the demand for services. Efforts to improve immunisation coverage and vaccine supply systems should streamline decentralised structures,

empower sub-national governments with financial and technical capacity, and promote strategies to improve the demand and use of services.

Globalization and Health

http://www.globalizationandhealth.com/ [Accessed 18 March 2017] Commentary

<u>Migration to middle-income countries and tuberculosis—global policies for global</u> economies

International migration to middle-income countries is increasing and its health consequences, in particular increasing transmission rates of tuberculosis (TB), deserve consideration. Migration and TB are a mat...

Julia Moreira Pescarini, Laura Cunha Rodrigues, M. Gabriela M. Gomes and Eliseu Alves Waldman

Globalization and Health 2017 13:15

Published on: 15 March 2017

Health Affairs

February 2017; Volume 36, Issue 2 http://content.healthaffairs.org/content/current Issue Focus: Delivery System Innovation [Reviewed earlier]

Health and Human Rights

Volume 18, Issue 2, December 2016
http://www.hhrjournal.org/

Special Section: Universal Health Co

Special Section: Universal Health Coverage and Human Rights

[Reviewed earlier]

Health Economics, Policy and Law

Volume 12 - Issue 1 - January 2017 https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue [Reviewed earlier]

Health Policy and Planning

Volume 31 Issue 18 March 2017 http://heapol.oxfordjournals.org/content/current [Reviewed earlier]

Health Research Policy and Systems

http://www.health-policy-systems.com/content [Accessed 18 March 2017] [No new digest content identified]

Humanitarian Exchange Magazine

Number 68 January 2017 http://odihpn.org/magazine/the-crisis-in-south-sudan/ The crisis in South Sudan

[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

Volume 13, Issue 3, 2017

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

Product Review

<u>Achievements and challenges for the use of killed oral cholera vaccines in the global</u> stockpile era

Pages 579-587 | Received 02 May 2016, Accepted 01 Oct 2016, Accepted author version posted online: 04 Nov 2016, Published online: 04 Nov 2016

<u>Sachin N. Desai, Lorenzo Pezzoli, Kathryn P. Alberti, Stephen Martin, Alejandro Costa, William Perea</u> & <u>show all</u>

ABSTRACT

Cholera remains an important but neglected public health threat, affecting the health of the poorest populations and imposing substantial costs on public health systems. Cholera can be eliminated where access to clean water, sanitation, and satisfactory hygiene practices are sustained, but major improvements in infrastructure continue to be a distant goal. New developments and trends of cholera disease burden, the creation of affordable oral cholera vaccines (OCVs) for use in developing countries, as well as recent evidence of vaccination impact has created an increased demand for cholera vaccines. The global OCV stockpile was established in 2013 and with support from Gavi, has assisted in achieving rapid access to vaccine in emergencies. Recent WHO prequalification of a second affordable OCV supports the stockpile goals of increased availability and distribution to affected populations. It serves as an essential step toward an integrated cholera control and prevention strategy in emergency and endemic setting.

Article

Antibody persistence up to 5 y after vaccination with a quadrivalent meningococcal ACWY-tetanus toxoid conjugate vaccine in adolescents

<u>Beatriz P. Quiambao</u>, <u>Ashish Bavdekar</u>, <u>Anand Prakash Dubey</u>, <u>Hemant Jain</u>, <u>Devayani Kolhe</u>, <u>Véronique Bianco</u>, <u>Jacqueline M. Miller</u> & <u>Marie Van der Wielen</u>

Pages: 636-644

Published online: 02 Feb 2017

Article

<u>Parents who refuse or delay HPV vaccine: Differences in vaccination behavior, beliefs, and clinical communication preferences</u>

Melissa B. Gilkey, William A. Calo, Macary W. Marciniak & Noel T. Brewer

Pages: 680-686

Published online: 20 Oct 2016

Article

<u>Parents' confidence in recommended childhood vaccinations: Extending the assessment, expanding the context</u>

Glen J. Nowak & Michael A. Cacciatore

Pages: 687-700

Published online: 28 Sep 2016

Review

<u>Impact of universal mass vaccination with monovalent inactivated hepatitis A vaccines – A systematic review</u>

Anke L. Stuurman, Cinzia Marano, Eveline M. Bunge, Laurence De Moerlooze & Daniel Shouval

Pages: 724-736

Published online: 27 Oct 2016

ABSTRACT

The WHO recommends integration of universal mass vaccination (UMV) against hepatitis A virus (HAV) in national immunization schedules for children aged ≥1 year, if justified on the basis of acute HAV incidence, declining endemicity from high to intermediate and cost-effectiveness. This recommendation has been implemented in several countries. Our aim was to assess the impact of UMV using monovalent inactivated hepatitis A vaccines on incidence and persistence of anti-HAV (IgG) antibodies in pediatric populations. We conducted a systematic review of literature published between 2000 and 2015 in PubMed, Cochrane Library, LILACS, IBECS identifying a total of 27 studies (Argentina, Belgium, China, Greece, Israel, Panama, the United States and Uruguay). All except one study showed a marked decline in the incidence of hepatitis A post introduction of UMV. The incidence in non-vaccinated age groups decreased as well, suggesting herd immunity but also rising susceptibility. Long-term anti-HAV antibody persistence was documented up to 17 y after a 2-dose primary vaccination. In conclusion, introduction of UMV in countries with intermediate endemicity for HAV infection led to a considerable decrease in the incidence of hepatitis A in vaccinated and in non-vaccinated age groups alike.

Infectious Agents and Cancer

http://www.infectagentscancer.com/content [Accessed 18 March 2017] [No new content]

Infectious Diseases of Poverty

http://www.idpjournal.com/content [Accessed 18 March 2017] [No new digest content identified]

International Health

Volume 9, Issue 1 1 January 2017 http://inthealth.oxfordjournals.org/content/current [Reviewed earlier]

International Journal of Community Medicine and Public Health

Vol 4, No 3 (2017) March 2017 http://www.ijcmph.com/index.php/ijcmph/issue/view/21 [Reviewed earlier]

International Journal of Epidemiology

Volume 45 Issue 5 October 2016 http://ije.oxfordjournals.org/content/current [Reviewed earlier]

International Journal of Infectious Diseases

March 2017 Volume 56, p1-286

http://www.ijidonline.com/issue/S1201-9712(17)X0003-9

Special Issue: Commemorating World Tuberculosis Day 2017

[40+ articles covering a range of TB thematic areas]

World TB Day 2017: Advances, Challenges and Opportunities in the "End-TB" Era

Eskild Petersen, Markus Maeurer, Ben Marais, Giovanni Battista Migliori, Peter Mwaba, Francine Ntoumi, Cris Vilaplana, Kami Kim, Marco Schito, Alimuddin Zumla p1-5

Published online: February 20, 2017

Novel approaches to tuberculosis vaccine development

Stefan H.E. Kaufmann, January Weiner, C. Fordham von Reyn

p263-267

Published online: November 2, 2016

Experimental animal modelling for TB vaccine development

Pere-Joan Cardona, Ann Williams

p268-273

Published online: February 3, 2017

Mycobacterium tuberculosis proteins involved in cell wall lipid biosynthesis improve **BCG** vaccine efficacy in a murine TB model

Martin Rao, Nathalie Cadieux, Megan Fitzpatrick, Steven Reed, Sergei Arsenian, Davide Valentini, Shreemanta Parida, Ernest Dodoo, Alimuddin Zumla, Markus Maeurer p274-282

Published online: February 1, 2017

March 14, 2017, Vol 317, No. 10, Pages 987-1090 http://jama.jamanetwork.com/issue.aspx Viewpoint

<u>Acknowledging and Overcoming Nonreproducibility in Basic and Preclinical</u> Research

John P. A. Ioannidis, MD, DSc

JAMA. 2017;317(10):1019-1020. doi:10.1001/jama.2017.0549

In this Viewpoint, Ioannidis discusses the problem of nonreproducibility in biomedical research and proposes implementing reproducibility assessments to improve research practices.

Abstract

The evidence for nonreproducibility in basic and preclinical biomedical research is compelling. Accumulating data from diverse subdisciplines and types of experimentation suggest numerous problems that can create a fertile ground for nonreproducibility. For example, most raw data and protocols are often not available for in-depth scrutiny and use by other scientists. The current incentive system rewards selective reporting of success stories. There is poor use of statistical methods, and study designs are often suboptimal. Simple laboratory flaws—eg, contamination or incorrect identification of widely used cell lines—occur with some frequency.

Research Letter

<u>Immune Responses to Novel Adenovirus Type 26 and Modified Vaccinia Virus Ankara–Vectored Ebola Vaccines at 1 Year</u>

Rebecca L. Winslow, MRCGP; Iain D. Milligan, MRCP; Merryn Voysey, MBiostat; et al. JAMA. 2017;317(10):1075-1077. doi:10.1001/jama.2016.20644

This study reports 1-year data from a randomized clinical trial testing the safety and immunogenicity of a novel adenovirus type 26 and modified vaccinia virus Ankara-vectored Ebola vaccines.

Abstract

The Ebola virus vaccine strategies evaluated by the World Health Organization in response to the 2014-2016 outbreak in West Africa included a heterologous primary and booster vaccination schedule of the adenovirus type 26 vector vaccine encoding Ebola virus glycoprotein (Ad26.ZEBOV) and the modified vaccinia virus Ankara vector vaccine, encoding glycoproteins from Ebola, Sudan, Marburg, and Tai Forest viruses nucleoprotein (MVA-BN-Filo). This schedule has been shown to induce immune responses that persist for 8 months after primary immunization, with 100% of vaccine recipients retaining Ebola virus glycoprotein-specific antibodies.1

JAMA Pediatrics

March 1, 2017, Vol 171, No. 3, Pages 207-312 http://archpedi.jamanetwork.com/issue.aspx [Reviewed earlier]

JBI Database of Systematic Review and Implementation Reports

March 2017 - Volume 15 - Issue 3 http://journals.lww.com/jbisrir/Pages/currenttoc.aspx [Reviewed earlier]

Journal of Community Health

Volume 42, Issue 2, April 2017

http://link.springer.com/journal/10900/42/2/page/1 [Reviewed earlier]

Journal of Epidemiology & Community Health

April 2017 - Volume 71 - 4 http://jech.bmj.com/content/current [New issue; No digest content identified]

Journal of Global Ethics

Volume 12, Issue 3, 2016
http://www.tandfonline.com/toc/rjge20/current

Theme Issue: Refugee Crisis: The Borders of Human Mobility

[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

January – March 2017 Vol 9 Issue 1 Pages 1-37 http://www.jgid.org/currentissue.asp?sabs=n [Reviewed earlier]

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

Volume 28, Number 1, February 2017 https://muse.jhu.edu/issue/35850 [Reviewed earlier]

Journal of Immigrant and Minority Health

Volume 19, Issue 2, April 2017 http://link.springer.com/journal/10903/19/2/page/1 [Reviewed earlier]

Journal of Immigrant & Refugee Studies

Volume 15, Issue 1, 2017 http://www.tandfonline.com/toc/wimm20/current [Reviewed earlier]

Journal of Infectious Diseases

Volume 215, Issue 3 1 Feburary 2017 http://jid.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Medical Ethics

March 2017 - Volume 43 - 3 http://jme.bmj.com/content/current [Reviewed earlier]

Journal of Medical Internet Research

Vol 19, No 3 (2017): March http://www.jmir.org/2017/3
[New issue; No digest content identified]

Journal of Medical Microbiology

Volume 66, Issue 2, February 2017 [Reviewed earlier]

Journal of Patient-Centered Research and Reviews

Volume 4, Issue 1 (2017) http://digitalrepository.aurorahealthcare.org/jpcrr/ [Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 5 Issue 18 March 2017 http://jpids.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Pediatrics

March 2017 Volume 182, p1-412 http://www.jpeds.com/current [Reviewed earlier]

Journal of Public Health Policy

Volume 38, Issue 1, February 2017 http://link.springer.com/journal/41271/38/1/page/1 [Reviewed earlier]

Journal of the Royal Society - Interface

01 March 2017; volume 14, issue 128 http://rsif.royalsocietypublishing.org/content/current [No new digest content identified]

Journal of Travel Medicine

Volume 24, Issue 2, March/April 2017

https://academic.oup.com/jtm/issue/24/2 [Reviewed earlier]

Journal of Virology

March 2017, volume 91, issue 6
http://jvi.asm.org/content/current
[New issue; No digest content identified]

The Lancet

Mar 18, 2017 Volume 389 Number 10074 p1075-1164 http://www.thelancet.com/journals/lancet/issue/current Editorial

Syria suffers as the world watches

The Lancet

March 1 5, 2017, marks the sixth anniversary of the civil war in Syria, a conflict perhaps unprecedented in its apparently shameless disregard for international law. The world has stood by in horror, watching the death toll rise and the humanitarian and refugee crises spread their indelible stain on the world map and human history. The Syrian conflict has been marked on the one hand by immense suffering and on the other by a stunning lack of adequate condemnation or action from governments, international agencies, or the medical community... [See Milestones above for full text]

Review

The Lancet Countdown: tracking progress on health and climate change

Nick Watts, W Neil Adger, Sonja Ayeb-Karlsson, Yuqi Bai, Peter Byass, Diarmid Campbell-Lendrum, Tim Colbourn, Peter Cox, Michael Davies, Michael Depledge, Anneliese Depoux, Paula Dominguez-Salas, Paul Drummond, Paul Ekins, Antoine Flahault, Delia Grace, Hilary Graham, Andy Haines, Ian Hamilton, Anne Johnson, Ilan Kelman, Sari Kovats, Lu Liang, Melissa Lott, Robert Lowe, Yong Luo, Georgina Mace, Mark Maslin, Karyn Morrissey, Kris Murray, Tara Neville, Maria Nilsson, Tadj Oreszczyn, Christine Parthemore, David Pencheon, Elizabeth Robinson, Stefanie Schütte, Joy Shumake-Guillemot, Paolo Vineis, Paul Wilkinson, Nicola Wheeler, Bing Xu, Jun Yang, Yongyuan Yin, Chaoqing Yu, Peng Gong, Hugh Montgomery, Anthony Costello

Summary

The Lancet Countdown: tracking progress on health and climate change is an international, multidisciplinary research collaboration between academic institutions and practitioners across the world. It follows on from the work of the 2015 Lancet Commission, which concluded that the response to climate change could be "the greatest global health opportunity of the 21st century". The Lancet Countdown aims to track the health impacts of climate hazards; health resilience and adaptation; health co-benefits of climate change mitigation; economics and finance; and political and broader engagement. These focus areas form the five thematic working groups of the Lancet Countdown and represent different aspects of the complex association between health and climate change. These thematic groups will provide indicators for a global overview of health and climate change; national case studies highlighting countries leading the way or going against the trend; and engagement with a range of stakeholders. The Lancet Countdown ultimately aims to report annually on a series of indicators across these five

working groups. This paper outlines the potential indicators and indicator domains to be tracked by the collaboration, with suggestions on the methodologies and datasets available to achieve this end. The proposed indicator domains require further refinement, and mark the beginning of an ongoing consultation process—from November, 2016 to early 2017—to develop these domains, identify key areas not currently covered, and change indicators where necessary. This collaboration will actively seek to engage with existing monitoring processes, such as the UN Sustainable Development Goals and WHO's climate and health country profiles. The indicators will also evolve over time through ongoing collaboration with experts and a range of stakeholders, and be dependent on the emergence of new evidence and knowledge. During the course of its work, the Lancet Countdown will adopt a collaborative and iterative process, which aims to complement existing initiatives, welcome engagement with new partners, and be open to developing new research projects on health and climate change.

Lancet Global Health

Mar 2017 Volume 5 Number 3 e229-e369 http://www.thelancet.com/journals/langlo/issue/current [Reviewed earlier]

Lancet Infectious Diseases

Mar 2017 Volume 17 Number 3 p237-348 e70-e106 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

Lancet Public Health

Mar 2017 Volume 2 Number 3 e121-e156 http://thelancet.com/journals/lanpub/issue/current [Reviewed earlier]

Maternal and Child Health Journal

Volume 21, Issue 3, March 2017 http://link.springer.com/journal/10995/21/3/page/1 From the Field

<u>Status of Breastfeeding and Child Immunization Outcomes in Clients of the Nurse–</u> Family Partnership

<u>William Thorland</u>, <u>Dustin Currie</u>, <u>Emily R. Wiegand</u>... *Abstract*

Background The Nurse—Family Partnership (NFP) is a home visiting program serving first-time, low-income mothers, with an area of focus on healthy early childhood development. Previous foundational trials of program effect on breastfeeding and immunizations have shown a mix of neutral and positive results. The present evaluation investigates these effects following program scale-up, using a large contemporary cohort of clients. Methods Nurse—Family Partnership client breastfeeding and immunization status were compared to National Survey of Children's Health data and National Immunization Survey data, respectively. Sample differences in demographic covariates were adjusted using logistic regression. Results Nurse—Family Partnership clients

were significantly more likely to have ever breastfed (adjusted prevalence ratio [aPR: 1.20 (1.17, 1.23)] and maintain breastfeeding at 6 [aPR: 1.17 (1.10, 1.24)] and 12 [aPR: 1.39 (1.25, 1.53)] months, but less likely to exclusively breastfeed at 6 months [aPR: 0.84 (0.70, 0.95)] NFP clients were significantly more likely to be up-to-date on immunizations at 6 [aPR: 1.23 (1.22, 1.25)], 18 [aPR: 1.33 (1.30,1.35)], and 24 [aPR: 1.15 (1.14, 1.16)] months of age than the reference cohort, with no significant difference at 12 months. Discussion Nurse–Family Partnership clients had more beneficial breastfeeding and immunization outcomes than children of mothers with demographically similar profiles. However, exclusive breastfeeding at 6 months lags behind the reference sample and represents a potential area for further improvement.

Medical Decision Making (MDM)

Volume 37, Issue 2, February 2017 http://mdm.sagepub.com/content/current [Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy
March 2017 Volume 95, Issue 1 Pages 1–209
http://onlinelibrary.wiley.com/doi/10.1111/milq.2017.95.issue-1/issuetoc
[Reviewed earlier]

Nature

Volume 543 Number 7645 pp288-458 16 March 2017 http://www.nature.com/nature/current issue.html Editorial

Announcement: Transparency upgrade for Nature journals

The Nature journals continue journey towards greater rigour. 15 March 2017

In 2013, this journal and many of the Nature research journals announced initiatives aimed at "reducing our irreproducibility" (Nature 496, 398; 2013). These included a life-sciences checklist for authors and editors intended to improve the transparency of the statistical and methodological aspects of laboratory work, together with abolition of length limits in online methods descriptions and greater attention to statistical evaluation.

At the same time, we encouraged the publishing of step-by-step protocols that are linked to the published papers and made available through the open repository <u>Protocol Exchange</u>. And, complementing our policy of mandated deposition for certain data types, we strongly encouraged or (in some cases) mandated the provision of source data underlying graphical items...

Nature Medicine

March 2017, Volume 23 No 3 pp265-395 http://www.nature.com/nm/journal/v23/n3/index.html [Reviewed earlier]

Nature Reviews Immunology

March 2017 Vol 17 No 3 http://www.nature.com/nri/journal/v17/n2/index.html [Reviewed earlier]

New England Journal of Medicine

March 16, 2017 Vol. 376 No. 11 http://www.nejm.org/toc/nejm/medical-journal [New issue; No digest content identified]

Pediatrics

March 2017, VOLUME 139 / ISSUE 3 http://pediatrics.aappublications.org/content/139/3?current-issue=y [Reviewed earlier]

Pharmaceutics

Volume 9, Issue 1 (March 2017) http://www.mdpi.com/1999-4923/9/1 [Reviewed earlier]

PharmacoEconomics

Volume 35, Issue 3, March 2017 http://link.springer.com/journal/40273/35/3/page/1 [New issue; No digest content identified]

PLOS Currents: Disasters

http://currents.plos.org/disasters/ [Accessed 18 March 2017] [No new content]

PLoS Currents: Outbreaks

http://currents.plos.org/outbreaks/ [Accessed 18 March 2017] [No new content]

PLoS Medicine

http://www.plosmedicine.org/ (Accessed 18 March 2017) Perspective [No new digest content identified]

PLoS Neglected Tropical Diseases

http://www.plosntds.org/ (Accessed 18 March 2017) Research Article

<u>Barriers to dog rabies vaccination during an urban rabies outbreak: Qualitative findings from Arequipa, Peru</u>

Ricardo Castillo-Neyra, Joanna Brown, Katty Borrini, Claudia Arevalo, Michael Z. Levy, Alison Buttenheim, Gabrielle C. Hunter, Victor Becerra, Jere Behrman, Valerie A. Paz-Soldan Research Article | published 17 Mar 2017 PLOS Neglected Tropical Diseases http://dx.doi.org/10.1371/journal.pntd.0005460

Abstract

Background

Canine rabies was reintroduced to the city of Arequipa, Peru in March 2015. The Ministry of Health has conducted a series of mass dog vaccination campaigns to contain the outbreak, but canine rabies virus transmission continues in Arequipa's complex urban environment, putting the city's 1 million inhabitants at risk of infection. The proximate driver of canine rabies in Arequipa is low dog vaccination coverage. Our objectives were to qualitatively assess barriers to and facilitators of rabies vaccination during mass campaigns, and to explore strategies to increase participation in future efforts.

Methodology/Principal findings

We conducted 8 focus groups (FG) in urban and peri-urban communities of Mariano Melgar district; each FG included both sexes, and campaign participants and non-participants. All FG were transcribed and then coded independently by two coders. Results were summarized using the Social Ecological Model. At the individual level, participants described not knowing enough about rabies and vaccination campaigns, mistrusting the campaign, and being unable to handle their dogs, particularly in peri-urban vs. urban areas. At the interpersonal level, we detected some social pressure to vaccinate dogs, as well as some disparaging of those who invest time and money in pet dogs. At the organizational level, participants found the campaign information to be insufficient and ill-timed, and campaign locations and personnel inadequate. At the community level, the influence of landscape and topography on accessibility to vaccination points was reported differently between participants from the urban and peri-urban areas. Poor security and impermanent housing materials in the peri-urban areas also drives higher prevalence of guard dog ownership for home protection; these dogs usually roam freely on the streets and are more difficult to handle and bring to the vaccination points.

Conclusions

A well-designed communication campaign could improve knowledge about canine rabies. Timely messages on where and when vaccination is occurring could increase dog owners' perception of their own ability to bring their dogs to the vaccination points and be part of the campaign. Small changes in the implementation of the campaign at the vaccination points could increase the public's trust and motivation. Location of vaccination points should take into account landscape and community concerns.

Author summary

Canine rabies was reintroduced in Arequipa, Peru in March 2015, a rare event in an area previously declared free of transmission. In Arequipa, annual mass dog vaccination is practiced as a preventive strategy, with additional campaigns being implemented since the recent detection of the virus. However, these additional efforts have not quelled the outbreak and low

dog vaccination coverage is driving ongoing transmission. We conducted focus groups in urban and peri-urban areas of Arequipa to identify barriers to and facilitators of canine vaccination during mass campaigns. Based on our findings, communication campaigns should seek to increase knowledge about canine rabies and the vaccination campaign, and provide timely messages on where and when vaccination is occurring. Small changes at the campaign's vaccination points could increase public's trust. Finally, there are differences between urban and peri-urban areas, such as landscape and topography that affect participation in mass vaccination campaigns and that should be considered when selecting locations for vaccination.

PLoS One

http://www.plosone.org/ [Accessed 18 March 2017] Research Article

"You can save time if..."—A qualitative study on internal factors slowing down clinical trials in Sub-Saharan Africa

Nerina Vischer, Constanze Pfeiffer, Manuela Limacher, Christian Burri Research Article | published 16 Mar 2017 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0173796 Abstract

Background

The costs, complexity, legal requirements and number of amendments associated with clinical trials are rising constantly, which negatively affects the efficient conduct of trials. In Sub-Saharan Africa, this situation is exacerbated by capacity and funding limitations, which further increase the workload of clinical trialists. At the same time, trials are critically important for improving public health in these settings. The aim of this study was to identify the internal factors that slow down clinical trials in Sub-Saharan Africa. Here, factors are limited to those that exclusively relate to clinical trial teams and sponsors. These factors may be influenced independently of external conditions and may significantly increase trial efficiency if addressed by the respective teams.

Methods

We conducted sixty key informant interviews with clinical trial staff working in different positions in two clinical research centres in Kenya, Ghana, Burkina Faso and Senegal. The study covered English- and French-speaking, and Eastern and Western parts of Sub-Saharan Africa. We performed thematic analysis of the interview transcripts.

Results

We found various internal factors associated with slowing down clinical trials; these were summarised into two broad themes, "planning" and "site organisation". These themes were consistently mentioned across positions and countries. "Planning" factors related to budget feasibility, clear project ideas, realistic deadlines, understanding of trial processes, adaptation to the local context and involvement of site staff in planning. "Site organisation" factors covered staff turnover, employment conditions, career paths, workload, delegation and management. Conclusions

We found that internal factors slowing down clinical trials are of high importance to trial staff. Our data suggest that adequate and coherent planning, careful assessment of the setting, clear task allocation and management capacity strengthening may help to overcome the identified internal factors and allow clinical trials to proceed more efficiently.

PLoS Pathogens

http://journals.plos.org/plospathogens/ [Accessed 18 March 2017] [No new digest content identified]

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

http://www.pnas.org/content/early/ [Accessed 18 March 2017] [No new digest content identified]

Prehospital & Disaster Medicine

Volume 32 - Issue 1 - February 2017 https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue [Reviewed earlier]

Preventive Medicine

Volume 96, Pages 1-164 (March 2017) http://www.sciencedirect.com/science/journal/00917435/96 [Reviewed earlier]

Proceedings of the Royal Society B

10 February 2016; volume 283, issue 1824 http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y [No new digest content identified]

Public Health Ethics

Volume 9, Issue 3 November 2016 http://phe.oxfordjournals.org/content/current [Reviewed earlier]

Public Health Reports

Volume 132, Issue 2, March/April 2017 http://phr.sagepub.com/content/current [Reviewed earlier]

Qualitative Health Research

Volume 27, Issue 4, March 2017 http://qhr.sagepub.com/content/current **Special Issue: Chronicity**

[Reviewed earlier]

Reproductive Health

http://www.reproductive-health-journal.com/content [Accessed 18 March 2017] [No new digest content identified]

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

Recently Published Articles -

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

Letter to the editor

Un llamado ético a la inclusión de mujeres embarazadas en investigación: Reflexiones del Foro Global de Bioética en Investigación [<u>An ethics call to include pregnant women in research: Reflections from the Global Forum on Bioethics in Research</u>]

Carla Saenz, Jackeline Alger, Juan Pablo Beca, José M. Belizán, Maria Luisa Cafferata, Julio Arturo Canario Guzmán, Jesica E. Candanedo P., Lissette Duque, Lester Figueroa, Ana Garcés, Lionel Gresh, Ida Cristina Gubert, Dirce Guilhem, Gabriela Guz, Gustavo Kaltwasser, A. Roxana Lescano, Florencia Luna, Alexandrina A. M. Cardelli, Ignacio Mastroleo, Irene N. Melamed, Agueda Muñoz del Carpio Toia, Ricardo Palacios, Gloria I. Palma, Sofía P. Salas, Xochitl Sandoval, Sergio Surugi de Siqueira, Hans Vásquez, y Bertha Ma. Villela de Vega PDF español PDF English Published 8 February

The Global Forum on Bioethics in Research (GFBR) met on November 3 and 4 in Buenos Aires, Argentina with the purpose of discussing the ethics of research with pregnant women. The GBRF is a global platform that brings together key actors with the purpose of promoting research conducted in an ethical way, strengthening health research ethics—particularly in lowand medium-income countries—and promoting collaboration between the countries in the north and the south.a Some of the participants of the GFBR attending from Latin America include ethicists, researchers, ethics committee members and representatives of health authorities from Argentina, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Panama, Peru, Nicaragua and Dominican Republic.

A legitimate concern about the protection of pregnant women and their embryos or fetuses has led most of the countries in the region to restrict studies with pregnant women exclusively to those that are about pregnancy, and to require the systematic exclusion of pregnant women and women who get pregnant from the rest of studies. Certainly, throughout the history of research ethics it has been mistakenly believed that protecting a population is synonymous with excluding that population from studies. It is now known that proceeding in this way implies exposing the very population we want to protect to larger risks.

Pregnancy implies substantial physiological changes that significantly influence the way the body metabolizes medications. However, by avoiding conducting research with pregnant women, the necessary scientific evidence to inform decisions on preventive treatments and interventions with effective and safe dosage for them and their embryos or fetuses has not

been produced. As an illustration, in 2001 there were barely a dozen medications approved for use during pregnancy in the United States1, and in 2011 the Food and Drug Administration (FDA) approved, for the first time in 15 years, a medication to be used during pregnancy.2 As a result, pregnant women's health is jeopardized every time we provide them health care.

Pregnant women get sick and sick women get pregnant, and it is not known if the medications they are prescribed are efficacious or even safe for them and their embryos or fetuses. Investigators, health professionals, health authorities, members of ethics review committees, ethicists and the scientific community in general have the moral duty to change this situation.

We have the duty to actively promote research with pregnant women, which is not only allowed by international ethical guidelines, but is also a moral imperative. Refusing to conduct research with pregnant women is perpetuating the risk pregnant women are exposed to daily. It is estimated that 94% of pregnant women in the United States use at least one medication that requires a prescription, and close to 50% use four or more medications during pregnancy.3 The responsible inclusion of pregnant women in research is a matter of equity and social justice.4

The authors, therefore, call attention to the importance of research with pregnant women, and call for action to promote this kind of research in the region. We must aim to change the paradigm of researchers, members of ethics review committees, sponsors and health authorities, who systematically exclude pregnant women from research. At the same time, we must strengthen our capacity to conduct a rigorous ethical analysis to determine on a case-by-case basis when is it acceptable to include pregnant women in research studies in a responsible way.

This reflection is appropriate in a context in which many Latin American countries are reviewing their regulatory frameworks for research with human subjects, since the inclusion of pregnant women in research will require a modification of many of the existing frameworks. The Zika virus outbreak has brought to the forefront the moral urgency to promote research with pregnant women.5 The publication in December 2016 of the revision of International Ethical Guidelines for Health-related Research Involving Humans from the Council for International Organizations of Medical Sciences (CIOMS), which provides substantial orientation to include pregnant women in research in an ethical way, establishes this moment as a propitious time for a call to reflection and change in our region....

Risk Analysis

January 2017 Volume 37, Issue 1 Pages 1–192 http://onlinelibrary.wiley.com/doi/10.1111/risa.2017.37.issue-1/issuetoc [Reviewed earlier]

Risk Management and Healthcare Policy

Volume 10, 2017 https://www.dovepress.com/risk-management-and-healthcare-policy-archive56 [Reviewed earlier]

Science

17 March 2017 Vol 355, Issue 6330 http://www.sciencemag.org/current.dtl

Special Issue - Frontiers in Cancer Therapy

Reviews

The cancer epigenome: Concepts, challenges, and therapeutic opportunities

By Mark A. Dawson

Science17 Mar 2017: 1147-1152

Abstract

Cancer biology is profoundly influenced by changes in the epigenome. Because the dynamic plasticity of the epigenome lends itself well to therapeutic manipulation, the past few years have witnessed an unprecedented investment in the development, characterization, and translation of targeted epigenetic therapies. In this review, I provide a broad context for recent developments that offer a greater understanding of how epigenetic regulators facilitate the initiation, maintenance, and evolution of cancer. I discuss newly developed epigenetic therapies and the cellular and molecular mechanisms that may govern sensitivity and resistance to these agents. I also review the rationale for future combination therapies involving existing and emerging epigenetic drugs.

Editorial

A new cancer ecosystem

By Sandra J. Horning Science17 Mar 2017: 1103

Summary

Cancer is increasingly being viewed as an ecosystem, a community in which tumor cells cooperate with other tumor cells and host cells in their microenvironment. As conditions change, the ecosystem evolves and adapts to ensure the survival and growth of cancer. Our understanding of the intricate relationships in this ecosystem has led to revolutionary treatments, including immunotherapy. Successful treatment and prevention of cancer require an ecosystem, too—a coordinated unit of researchers, patients, health care professionals, health care systems, regulatory agencies, government, and industry. How can these partners work together as one interconnected community?

Policy Forum

How economics can shape precision medicines

By A. D. Stern, B. M. Alexander, A. Chandra

Science17 Mar 2017: 1131-1133 Restricted Access Innovation incentives, pricing, and access are critical

Summary

Many public and private efforts in coming years will focus on research in precision medicine, developing biomarkers to indicate which patients are likely to benefit from a certain treatment so that others can be spared the cost—financial and physical—of being treated with unproductive therapies and therapeutic signals can be more easily uncovered. However, such research initiatives alone will not deliver new medicines to patients in the absence of strong incentives to bring new products to market. We examine the unique economics of precision medicines and associated biomarkers, with an emphasis on the factors affecting their development, pricing, and access.

Science Translational Medicine

15 March 2017 Vol 9, Issue 381 http://stm.sciencemag.org/
[New issue; No relevant content identified]

Social Science & Medicine

Volume 175, Pages 1-252 (February 2017) http://www.sciencedirect.com/science/journal/02779536/175 [Reviewed earlier]

Travel Medicine and Infectious Diseases

January-February, 2017 Volume 15 http://www.travelmedicinejournal.com/ [Reviewed earlier]

Tropical Medicine & International Health

March 2017 Volume 22, Issue 3 Pages 253–369 http://onlinelibrary.wiley.com/doi/10.1111/tmi.2017.22.issue-3/issuetoc [Reviewed earlier]

Vaccine

Volume 35, Issue 12, Pages 1579-1662 (14 March 2017) http://www.sciencedirect.com/science/journal/0264410X/35/12 Regular Papers

<u>Immunity against vaccine-preventable diseases in Finnish pediatric healthcare</u> workers in 2015

Original Research Article

Pages 1608-1614

Karoliina Koivisto, Laura Puhakka, Maija Lappalainen, Soile Blomqvist, Harri Saxén, Tea Nieminen

Abstract

Healthcare workers (HCWs) pose a risk to themselves and their patients if not protected against vaccine-preventable diseases. Alarmingly, lacking immunity has been reported in several studies. We assessed the immunity against vaccine-preventable diseases in 157 pediatric HCWs in Helsinki Children's Hospital. The HCWs enrolled answered a questionnaire and gave a serum sample. Antibodies were measured with EIA against MMR-diseases, tetanus and diphtheria toxins, Hepatitis B (HBV), Hepatitis A (HAV), varicella zoster and pertussis toxin. Neutralizing antibodies against poliovirus 1, 2 and 3 were measured. All of the HCWs had antibodies against tetanus and 89.8% against diphtheria. All had measurable levels of polio antibodies to all three polioviruses. 41% had suboptimal levels of antibodies against at least one of the antigens tested: MMR-viruses, diphtheria, HBV or polio. Measles, mumps and rubella antibodies were detectable in 81.5%, 89.2% and 93%, respectively. Only one HCW had no varicella-antibodies. Hepatitis B surface antibodies (HBsAb) were detected in 89.8% of the nurses. 67.5% had HAV-

antibodies. A poor correlation between detected antibody levels and reported vaccination history was noticed, indicating a need for a universal record system for registering the vaccines given to each individual.

Rotavirus immunization: Global coverage and local barriers for implementation

Original Research Article

Pages 1637-1644

Andrea Lo Vecchio, Ilaria Liguoro, Jorge Amil Dias, James A. Berkley, Chris Boey, Mitchell B. Cohen, Sylvia Cruchet, Eduardo Salazar-Lindo, Samir Podder, Bhupinder Sandhu, Philip M. Sherman, Toshiaki Shimizu, Alfredo Guarino

Abstract

Background

Rotavirus (RV) is a major agent of gastroenteritis and an important cause of child death worldwide. Immunization (RVI) has been available since 2006, and the Federation of International Societies of Gastroenterology Hepatology and Nutrition (FISPGHAN) identified RVI as a top priority for the control of diarrheal illness. A FISPGHAN working group on acute diarrhea aimed at estimating the current RVI coverage worldwide and identifying barriers to implementation at local level.

Methods

A survey was distributed to national experts in infectious diseases and health-care authorities (March 2015–April 2016), collecting information on local recommendations, costs and perception of barriers for implementation.

Results

Forty-nine of the 79 contacted countries (62% response rate) provided a complete analyzable data. RVI was recommended in 27/49 countries (55%). Although five countries have recommended RVI since 2006, a large number (16, 33%) included RVI in a National Immunization Schedule between 2012 and 2014. The costs of vaccination are covered by the government (39%), by the GAVI Alliance (10%) or public and private insurance (8%) in some countries. However, in most cases, immunization is paid by families (43%).

Elevated cost of vaccine (49%) is the main barrier for implementation of RVI. High costs of vaccination (rs = -0.39, p = 0.02) and coverage of expenses by families (rs = 0.5, p = 0.002) significantly correlate with a lower immunization rate. Limited perception of RV illness severity by the families (47%), public-health authorities (37%) or physicians (24%) and the timing of administration (16%) are further major barriers to large- scale RVI programs. Conclusions

After 10 years since its introduction, the implementation of RVI is still unacceptably low and should remain a major target for global public health. Barriers to implementation vary according to setting. Nevertheless, public health authorities should promote education for caregivers and health-care providers and interact with local health authorities in order to implement RVI.

<u>Effect of stepwise perinatal immunization education: A cluster-randomized</u> controlled trial

Original Research Article

Pages 1645-1651

Aya Saitoh, Akihiko Saitoh, Isamu Sato, Tomohiro Shinozaki, Hajime Kamiya, Satoko Nagata Abstract

Background

Perinatal immunization education is important for improving the immunization outcomes of infants; however, the content of educational materials used at each perinatal period has not been carefully evaluated. We hypothesized that stepwise education offered at different perinatal periods would improve infant immunization status and enhance maternal immunization knowledge.

Methods

In this cluster-randomized controlled trial, pregnant women were recruited from nine obstetric sites in Niigata, Japan. The intervention group received a stepwise, interactive education intervention (prenatally, postnatally, and 1 month after birth). The control group received a leaflet containing general information on immunization. Infant immunization status was evaluated at 6 months of age, and maternal immunization knowledge was evaluated by a written survey after each intervention.

Results

Among 188 study participants, 151 (80.3%) replied to the final post-intervention survey. At 6 months of age, the percentage of children who completed three doses of inactivated polio, diphtheria, tetanus toxoid, and acellular pertussis (DTaP-IPV) vaccine was higher in the intervention group than in the control (p = 0.04); however, no differences between groups were observed for the Haemophilus influenzae type b (Hib) (p = 0.67) or 13-valent pneumococcal conjugate (PCV13) vaccines (p = 0.20). The duration to the completion of the third dose of the DTaP-IPV, Hib, and PCV13 vaccines was shorter in the intervention group than in the control (p = 0.03, p < 0.01, and p < 0.01, respectively). Furthermore, maternal knowledge scores exhibited significantly greater improvement in the intervention group over time compared with those of the control group (p = 0.02).

Conclusions

Stepwise perinatal immunization education improved immunization schedule adherence for required vaccines and improved maternal immunization knowledge.

Vaccine: Development and Therapy

https://www.dovepress.com/vaccine-development-and-therapy-archive111 (Accessed 18 March 2017)
[No new content]

Vaccines — Open Access Journal

http://www.mdpi.com/journal/vaccines (Accessed 18 March 2017) [No new content]

Value in Health

March 2017 Volume 20, Issue 3, p309-518 http://www.valueinhealthjournal.com/current [New issue; No digest content identified]

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<u>From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary</u>

Cold Spring Harbor Perspectives in Biology

http://cshperspectives.cshlp.org/content/early/recent Early Release Articles – Last updated March 13, 2017

Immune Memory and Vaccines: Great Debates What Is Wrong with Pertussis Vaccine Immunity?: Inducing and Recalling Vaccine-Specific Immunity

Christiane S. Eberhardt and Claire-Anne Siegrist

Cold Spring Harb Perspect Biol doi:10.1101/cshperspect.a029629

Acellular pertussis vaccines exhibit only short-term effectiveness. This may be due to (1) vaccine-specific (not pathogen-specific) immunity and (2) the failure of memory B and T cells to reactivate upon pathogen exposure.

<u>Immune Memory and Vaccines: Great Debates What Is Wrong with Pertussis Vaccine Immunity?</u>: Why Immunological Memory to Pertussis Is Failing

Dimitri A. Diavatopoulos and Kathryn Margaret Edwards

Cold Spring Harb Perspect Biol doi:10.1101/cshperspect.a029553

Children primed with acellular pertussis vaccines exhibit a Th2-dominant immune response and possess higher levels of antigen-specific IgG4, which leads to a suboptimal immune response and the progressive loss of protection.

Immune Memory and Vaccines: Great Debates What Is Wrong with Pertussis Vaccine Immunity?: The Problem of Waning Effectiveness of Pertussis Vaccines Nicolas Burdin, L.K. Handy, and S.A. Plotkin

Cold Spring Harb Perspect Biol doi:10.1101/cshperspect.a029454

Acellular pertussis vaccines provide protection during the first years of life, but their effectiveness wanes a few years post-boosters. This may be because these vaccines tend to produce Th1/Th2 responses (instead of Th1/Th17).

Academic Pediatrics

Available online 9 March 2017 In Press, Accepted Manuscript

<u>Impact of Non-Medical Vaccine Exemption Policies on the Health and Economic Burden of Measles</u>

MD Whittington, A Kempe, A Dempsey, R Herlihy... - Academic Pediatrics, 2017 Abstract

Objective

Despite relatively high national vaccination coverage for measles, geographic vaccination variation exists resulting in clusters of susceptibility. A portion of this geographic variation can be explained by differences in state policies related to non-medical vaccine exemptions. The objective of this analysis was to determine the magnitude, likelihood, and cost of a measles outbreak under different non-medical vaccine exemption policies.

An agent-based transmission model simulated the likelihood and magnitude of a measles outbreak under different non-medical vaccine exemption policies, previously categorized as easy, medium, or difficult. The model accounted for measles herd immunity, infectiousness of

the pathogen, vaccine efficacy, duration of incubation and communicable periods, acquired natural immunity, and the rate of recovery. Public health contact tracing was also modeled. Model outcomes, including the number of secondary cases, hospitalizations, and deaths, were monetized to determine the economic burden of the simulated outbreaks. Results

A state with easy non-medical vaccine exemption policies is 140% and 190% more likely to experience a measles outbreak compared to states with medium or difficult policies, respectively. The magnitude of these outbreaks can be reduced by half by strengthening exemption policies. These declines are associated with significant cost reductions to public health, the healthcare system, and the individual.

Conclusions

Strengthening non-medical vaccine exemption policies is one mechanism to increase vaccination coverage to reduce the health and economic impact of a measles outbreak. States exploring options for decreasing their vulnerability to outbreaks of vaccine preventable diseases should consider more stringent requirements for non-medical vaccine exemptions.

Computational Biology and Chemistry

Available online 10 March 2017 In Press, Accepted Manuscript

A Bioinformatics approach to designing a Zika virus vaccine

S Dey, A Nandy, SC Basak, P Nandy, S Das

Highlights

- :: Zika virus envelope gene and protein sequences analysed.
- :: Based on maximum sequences available, identified peptide segments with minimum variability and maximum surface accessibility using alignment-free numerical characterization techniques.
- :: Checked identified regions on 3D crystal structures to ensure solvent accessibility.
- :: Confirmed linear and conformational epitope potential of identified segments using web based servers.
- :: Confirmed no auto-immune threats from the segments that passed all the above tests.
- :: These peptide regions are suggested as starting points for rational design of peptide vaccines subject to wet lab verification.

Abstract

The Zika virus infections have reached epidemic proportions in the Latin American countries causing severe birth defects and neurological disorders. While several organizations have begun research into design of prophylactic vaccines and therapeutic drugs, computer assisted methods with adequate data resources can be expected to assist in these measures to reduce lead times through bioinformatics approaches. Using 60 sequences of the Zika virus envelope protein available in the GenBank database, our analysis with numerical characterization techniques and several web based bioinformatics servers identified four peptide stretches on the Zika virus envelope protein that are well conserved and surface exposed and are predicted to have reasonable epitope binding efficiency. These peptides can be expected to form the basis for a nascent peptide vaccine which, enhanced by incorporation of suitable adjuvants, can elicit immune response against the Zika virus infections.

* * * *

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 18 March 2017 [No new, unique, relevant content]

BBC

http://www.bbc.co.uk/ Accessed 18 March 2017 [No new, unique, relevant content]

The Economist

http://www.economist.com/ Accessed 18 March 2017 [No new, unique, relevant content]

Financial Times

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

Accessed 18 March 2017

[No new, unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 18 March 2017

How Does Trump's Plan To Gut Health And Medical Research Make America Great?

Judy Stone, Contributor

17 March 2017

Trump's budget proposal would decimate NIH, biomedical research and emergency preparedness, hurt the economy, and destroy our innovation and research. How does this MAGA?

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 18 March 2017 Health Mar 13, 2017

Making Insulin Affordable - Its Cost Is Creating a Crisis

Fran Quigley

Foreign Policy

http://foreignpolicy.com/ Accessed 18 March 2017 [No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/ Accessed 18 March 2017 [No new, unique, relevant content]

New Yorker

http://www.newyorker.com/ Accessed 18 March 2017 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 18 March 2017 Health

<u>Trump Plan Eliminates a Global Sentinel Against Disease, Experts Warn</u>

By DONALD G. McNEIL Jr. MARCH 17, 2017

Nobody in the United States has ever died from an intercontinental missile strike. Over the past 50 years, hundreds of billions of dollars have been spent on silos, submarines, bombers and satellites to ensure that does not happen.

During the same period, about 1.3 million Americans have died from intercontinental virus strikes. The toll includes one American dead of <u>Ebola</u>, 2,000 dead of <u>West Nile virus</u>, 700,000 dead of <u>AIDS</u>, and 1.2 million dead of <u>flu</u> — a virus that returns from abroad each winter.

The <u>federal budget</u> to stop these threats is infinitely smaller than the Pentagon's, and the Trump administration's proposed cuts to the National Institutes of Health, and particularly its plan to eliminate the Fogarty International Center at the N.I.H., would, global health experts say, make America vulnerable again.

The Fogarty center, based in Bethesda, Md., was one of the few specific trims in President Trump's "skinny budget." It is an odd target: Eliminating it would save only \$69 million. The administration did not explain why it was picked, leaving scientists to surmise that it was because the center's grants pay American doctors to train foreign ones. Mr. Trump has a well-known "America First" bent.

But most of those trainees focus on diseases that circle the globe, researchers point out, including flu, mosquito-borne viruses, vaccine-preventable diseases and bioterrorism agents. The idea of eliminating the center "is just atrocious," said Dr. Daniel G. Bausch, a Tulane University virologist and the scientific program director at the American Society of Tropical Medicine and Hygiene. "It would have a severe impact not just on global health <u>but on</u> American health."...

Wall Street Journal

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

Accessed 18 March 2017

[No new, unique, relevant content]

Washington Post

http://www.washingtonpost.com/ Accessed 18 March 2017

Small Brazil city on edge after man dies from yellow fever

.. The vaccinations come as cases In the city center and rural areas of Casimiro de Abreu, about 93 miles (150 kilometers) from Rio de Janeiro, a large tent has been set up to vaccinate people. Authorities say around 30,000 of the city's 42,000 people have been vaccinated in recent days..

.Yesica Fisch | AP · Foreign · Mar 18, 2017

Why mandatory vaccinations are critical, visualized

Philip Bump · Politics · Mar 17, 2017

Brazil yellow fever cases pass 400; more than 130 dead

SAO PAULO — Brazil's Health Ministry says 424 people have been infected with yellow fever in the largest outbreak the country has seen in years. Of those, 137 have died.

An update published Thursday said that more than 900 other cases are under investigation. During the current outbreak in the Southern Hemisphere's summer rainy season, the vast majority of the confirmed cases have been in the southeastern state of Minas Gerais.

Much of Brazil is considered at risk for yellow fever, and people in those areas are supposed to be vaccinated. But this outbreak struck some areas not previously considered at risk, and Brazil is rushing vaccines to those areas...

Associated Press · Foreign · Mar 16, 2017

Think Tanks et al

Brookings

http://www.brookings.edu/ Accessed 18 March 2017 [No new relevant content]

Center for Global Development

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

Accessed 18 March 2017

[No new relevant content]

Council on Foreign Relations

http://www.cfr.org/ Accessed 18 March 2017 [No new relevant content]

CSIS

https://www.csis.org/ Accessed 18 March 2017 [No new relevant content]

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

CVEP is a program of the <u>GE2P2 Global Foundation</u> – 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 <u>Bill & Melinda Gates Foundation</u>; <u>Aeras</u>; <u>PATH</u>; the <u>International Vaccine Institute</u> (IVI); and industry resource members Crucell/Janssen/J&J, Pfizer, PRA Health Sciences, Sanofi Pasteur U.S., Takeda, Valera (list in formation), and the Developing Countries Vaccine Manufacturers Network (<u>DCVMN</u>).

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.