Vaccines and Global Health: The Week in Review
12 September 2015
Center for Vaccine Ethics & Policy (CVEP)

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

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

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

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

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

EBOLA/EVD **[**to 12 September 2015]
Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

Ebola Situation Report - 9 September 2015
[Excerpts] SUMMARY

:: There were 2 confirmed cases of Ebola virus disease (EVD) reported in the week to 6 September: 1 in Guinea and 1 in Sierra Leone. Overall case incidence has remained stable at 2 or 3 confirmed cases per week for 6 consecutive weeks. There are a total of three active chains of transmission—...

Stopping Ebola: It takes collaboration to care for a village
9 September 2015

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POLIO [to 12 September 2015]
Public Health Emergency of International Concern (PHEIC)

GPEI Update: Polio this week - *As of 9 September 2015*
Global Polio Eradication Initiative
[Editor's Excerpt and text bolding]
Full report: http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx
:: A case of vaccine-derived poliovirus type 2 (VDPV2) has been reported with onset of paralysis on 20 July 2015 in Bamako city, Mali. The virus was isolated from a 19-month old boy of Guinean nationality. The closest genetic match to this case is from a case from Kankan, Guinea, with onset of paralysis on 30 August 2014. The genetic changes suggest that the cVDPV2 has been circulating for more than 12 months. Discussions are currently ongoing with national health authorities to plan and implement an urgent outbreak response. *[see below]*
:: The Global Polio Eradication Initiative is proud to partner with the Global Citizen Festival on 26 September, featuring Ed Sheeran, Pearl Jam and other headliners to help fight extreme poverty and inequality around the world, and support approaches that will make life more sustainable for people and the planet

Selected Country Report Content
Afghanistan
:: One new wild poliovirus type 1 (WPV1) case was reported in the past week in Zaranj district of Nimroz province. This most recent case had onset of paralysis on 7 August. The total number of WPV1 cases for 2015 is now nine.
:: Intensive and strengthened supplementary immunization activities are planned in the coming months. Subnational Immunization Days (SNIDs) will take place across the south and east of the country on 20 - 22 September using bivalent OPV and National Immunization Days (NIDs) will take place on 18 - 20 October using trivalent OPV.
Pakistan
:: One new wild poliovirus type 1 (WPV1) case was confirmed in the past week in Quetta district of Balochistan. This most recent case had onset of paralysis on 17 August. The total number of WPV1 cases for 2015 is now 30, compared to 137 at this time last year
West Africa
:: One new circulating vaccine-derived poliovirus type 2 (cVDPV2) case was reported in the past week, with onset of paralysis in Commune III, Bamako, Mali, on 20 July. The virus was isolated from a 19-month old boy of Guinean nationality. The closest genetic match to this case is from a case from Kankan, Guinea, from 30 August 2014. The genetic changes suggest that the cVDPV2 has been circulating for more than 12 months. Discussions are currently ongoing with

national health authorities to plan and implement an urgent outbreak response following the cVDPV2 outbreak.

Circulating vaccine-derived poliovirus in Mali

Outbreak stems from poor immunization coverage

GPEI News Story - 9 September 2015 - A case of vaccine-derived poliovirus type 2 (VDPV2) has been reported with onset of paralysis on 20 July 2015 in Bamako city, Mali. The virus was isolated from a 19-month old boy of Guinean nationality. The closest genetic match to this case is from a case from Kankan, Guinea, from 30 August 2014. The genetic changes suggest that the cVDPV2 has been circulating for more than 12 months.

The Ministries of Health in both Mali and Guinea, WHO and partners of the Global Polio Eradication Initiative are immediately taking actions to initiate appropriate and targeted immunization activities that are in line with the Standard Operation Procedures for outbreak of polioviruses. In the last 12 months, two national polio supplemental immunization activities (NIDs) using trivalent oral polio vaccine have been carried out in Mali, one in September 2014 and the most recent in April 2015. At least five rounds of large scale supplementary immunization activities are now being planned as part of emergency outbreak response activities. Planning is underway to reach all children with trivalent OPV in the coming weeks, and further NIDs will take place in October and November 2015.

When a child is immunized with oral polio vaccine (OPV), the weakened vaccine-virus replicates in the intestine for a limited period, thereby developing immunity against polio. The vaccine-virus is also excreted through faecal excreta into the environment. In areas of inadequate sanitation, this excreted vaccine-virus can spread in the immediate community (and this can offer protection to other children through 'passive' immunization), before eventually dying out. On rare occasions, if a population is seriously under-immunized, an excreted vaccine-virus can continue to circulate for an extended period of time and genetically change into a form that can paralyse children that are not fully immunized – this is what is known as a circulating vaccine-derived poliovirus (cVDPV). Hence, the problem is not with the vaccine itself but low vaccination coverage. If a population is fully immunized, they will be protected against both vaccine-derived and wild polioviruses.

Due to the Ebola crisis in West Africa, both population immunity levels and surveillance sensitivity have been severely affected in some parts of the region. Subnational surveillance gaps persist in both countries. In Guinea, vaccination coverage dropped from 63% in 2013 to 42% in 2014. In Mali, national coverage in 2014 is 84%, however subnationally gaps remain; Bamako province has coverage rates of 63% in 2015. Nationally Mali has strong surveillance capacity, yet undetected circulation of this strain for an extended period of time suggests possible subnational surveillance gaps.

Conference: Meeting the Challenges of Global Polio Eradication

Center for Strategic and International Studies
Monday, September 28, 2015 8:30 AM – 2:30 PM
2nd Floor Conference Room
1616 Rhode Island Avenue, NW

Washington, D.C. 20036
Overview
The number of wild poliovirus cases worldwide is significantly lower than last year, as Pakistan improves its immunization reach and Africa goes more than a year since its last reported case. Nonetheless, substantial challenges to global eradication remain, including newly reported cases of vaccine-derived poliovirus in Ukraine and Mali. Join the CSIS Global Health Policy Center on September 28 as it welcomes keynote speakers Dr. Thomas Frieden, Director of the U.S. Centers for Disease Control and Prevention and Chair of the global Polio Oversight Board, and Sir Liam Donaldson, Chair of the Global Polio Eradication Initiative's Independent Monitoring Board. They and other top experts will discuss current and future eradication challenges, including: the ambitious vaccine switch needed to address vaccine-derived polio cases; plans to transition polio-related assets and knowledge to national health systems and other health priorities; and measures to address political instability and insecurity hampering vaccination efforts. Lunch will be provided.
RSVP here for online and direct participation.

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MERS-CoV [to 12 September 2015]
Global Alert and Response (GAR) – Disease Outbreak News (DONs)
:: 9 September 2015 Middle East Respiratory Syndrome coronavirus (MERS-CoV) – Saudi Arabia
:: 8 September 2015 Middle East Respiratory Syndrome coronavirus (MERS-CoV) – Saudi Arabia
:: 6 September 2015 Middle East Respiratory Syndrome coronavirus (MERS-CoV) – Jordan

Current outbreak situation in the Republic of Korea and China as of 11 September 2015
The last case of MERS-CoV infection in the Republic of Korea as reported to WHO was laboratory confirmed on 4 July 2015.

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WHO & Regionals [to 12 September 2015]

Implementing comprehensive HIV and STI programmes with men who have sex with men
September 2015 -- WHO and partners have published practical advice on implementing HIV and sexually transmitted infection programmes with men who have sex with men. Among other things this publication covers behavioural prevention programmes such as use of condoms and lubricant and early diagnosis. It also addresses community empowerment, violence, health-care services, and service delivery.

The **Weekly Epidemiological Record (WER) 11 September 2015**, vol. 90, 37 (pp. 477–488) includes -
:: Immunization and Vaccine-related Implementation Research Advisory Committee (IVIR-AC): summary of conclusions and recommendations, 9–11 June 2015 meeting
:: Performance of acute flaccid paralysis (AFP) surveillance and incidence of poliomyelitis, 2015

Global Alert and Response (GAR) – Disease Outbreak News (DONs)
:: 11 September 2015 Cholera – United Republic of Tanzania
:: 6 September 2015 Plague – Madagascar

:: WHO Regional Offices
WHO African Region AFRO
:: Down to zero – Nigeria on the path to polio eradication
Abuja, 11 September 2015 - There's starting to be a breath of fresh air for parents in Africa, and around the world, as Nigeria approaches being removed from the notorious polio-endemic list. From more than 1122 cases in 2006 to zero today, Nigeria has made tremendous progress in polio eradication with no children being paralyzed in more than one year.
:: Child mortality rates plunge by more than half since 1990 but global MDG target missed by wide margin - 09 September 2015
:: Polio outbreak confirmed in Mali - 07 September 2015

WHO Region of the Americas PAHO
:: PAHO/WHO promotes safe, green and "smart" hospitals in the Caribbean (09/10/2015)

WHO South-East Asia Region SEARO
:: Make Universal Health Coverage a reality: WHO 11 September 2015
:: Focus on neglected tropical diseases: WHO 10 September 2015

WHO European Region EURO
:: WHO European governing body to convene in Vilnius 10-09-2015
:: New evidence: how the economic crisis has affected health systems and health in Europe 07-09-2015

WHO Eastern Mediterranean Region EMRO
:: Yemen's largest blood transfusion centre in Sana'a faces threat of closure
Sana'a, 3 September 2015 – WHO is calling for support to prevent Yemen's largest blood transfusion centre in Sana'a from closing down due to a shortage of blood bags, reagents and fuel to run the generators. During the past 6 months of the crisis, the need for blood transfusion services has more than doubled. Although there are many people willing to donate blood, the centre is unable to cope due to shortages in blood bags and reagents to collect, store and screen blood and other components.

WHO Western Pacific Region
No new digest content identified.

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CDC/MMWR/ACIP Watch [to 12 September 2015]
http://www.cdc.gov/media/index.html

MMWR September 11, 2015 / Vol. 64 / No. 35
:: Influences of Preparedness Knowledge and Beliefs on Household Disaster Preparedness
:: CDC Grand Rounds: Addressing Preparedness Challenges for Children in Public Health Emergencies
:: Elimination of Ebola Virus Transmission in Liberia — September 3, 2015
:: Ebola Virus Disease — Sierra Leone and Guinea, August 2015
:: Notes from the Field: Pneumonia Associated with an Influenza A H3 Outbreak at a Skilled Nursing Facility — Florida, 2014

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Initiatives/Announcements/Milestones

IOM / International Organization for Migration [to 12 September 2015]
http://www.iom.int/press-room/press-releases
IOM Helps Prevent Disease at UN Displacement Sites in South Sudan
09/11/15
South Sudan - To help stem the spread of disease in crowded displacement sites in South Sudan, IOM health teams are promoting preventative health care, including two cholera vaccination campaigns benefiting 113,600 internally displaced persons (IDPs).
From 13–16 August and 2–5 September, IOM, with the support of its partners, conducted a two-round oral cholera vaccination (OCV) campaign at the UN protection of civilians (PoC) site in Malakal, Upper Nile State, reaching more than 42,300 people with at least one dose of the vaccine.
Preventing the spread of the deadly disease is critical, as the recent influx of IDPs has led to crowded living conditions for the estimated 45,400 people seeking shelter at the site.
IOM also led a two-round OCV at the UN PoC site in Bentiu, Unity State, in June, vaccinating more than 71,200 people against the disease. As hundreds of IDPs continue to arrive at the PoC each day, additional cholera vaccines have been dispatched to the site. The Bentiu PoC site is providing protection and shelter for 116,700 people, an increase of more than 50 per cent since April.
"These preventative efforts are particularly crucial as the country faces a number of water-borne disease outbreaks, only one of which is cholera. With the start of the rainy season, IOM clinics have seen a more than doubling of confirmed malaria cases since mid-July," explains IOM South Sudan Migration Health Programme Coordinator Haley West…

UNICEF [to 12 September 2015]
http://www.unicef.org/media/media_78364.html
United action needed now for child refugees: UNICEF

NEW YORK/GENEVA, 12 September 2015 – Europe has a brief window of opportunity, before winter approaches, to protect and care for the tens of thousands of children seeking refuge, UNICEF said today.

About a quarter of those seeking refuge in Europe this year are children. More than 106,000 children have claimed asylum within the first half of 2015, up 75 per cent from last year. Many refugee and migrant children in Europe are living in overcrowded and inadequate conditions, where they are at risk of violence, exploitation and abuse. Many are sleeping out in the open air; as winter approaches, the health of young children is especially at risk, including from the threat of diseases like pneumonia. Only concerted action to accommodate and care for children now will prevent more deaths and suffering in the months ahead.

With the growing numbers of children making perilous journeys into and across Europe, collective action with a fair distribution of responsibility across the European Union is essential. This should include putting in place a number of immediate safeguards for children and their families:
:: Safe, child-friendly reception facilities as children arrive, with access to health care, psychosocial support, recreation and schooling.
:: More resettlement places across Europe and humanitarian visas for children and their families. The processing of asylum cases should be timely, and always focus on the best interests of the children.
:: Stronger commitment to resettlement of refugees from countries in conflict to reduce the likelihood that refugees resort to unsafe routes and people smuggling.
:: Stepped-up search and rescue operations at sea and on land.
:: Speeding up family reunification programmes for separated and unaccompanied children.
:: Adequate numbers of trained child welfare specialists to care for and counsel children and families.

Such care is enshrined in the Convention on the Rights of the Child, which provides for the protection of all children – whether on the move from their homes, on the seas, over land, or on the shores of destination countries.

UNICEF urges the international community to address the root causes of this huge movement of desperate children through more vigorous diplomatic efforts to end conflicts, and to provide the required development and humanitarian support in countries of origin.

Gavi [to 12 September 2015]
http://www.gavialliance.org/library/news/press-releases/
China seals commitment to support immunisation in developing countries

Beijing, 9 September 2015 – The Chinese Government today signed an agreement to provide US$ 5 million to help Gavi, the Vaccine Alliance support the immunisation of children in the world's poorest countries.

The agreement marks the first time China has provided funding for Gavi and comes four years after Vaccine Alliance support to help the Chinese Government introduce hepatitis B vaccines ended. According to the agreement, China will contribute funding for the period 2016-2020, when Gavi plans to help developing countries to immunise an additional 300 million children…

...Dr Ren Minghui, Director General, Department of International Cooperation, China National Health and Family Planning Commission, said: "We are very pleased to sign the agreement with Gavi, the Vaccine Alliance. We hope that our collaboration with Gavi will leverage some of our own experiences and achievements in establishing and strengthening our immunisation programme. This will help improve and promote immunisation programmes in other developing countries helping achieve global development goals. The signing of this agreement once again demonstrates China's commitment to strengthening international cooperation, promoting global immunisation and helping developing countries to address the most pressing health challenges. It also demonstrates China's increased leadership role in global public health."…

IAVI International AIDS Vaccine Initiative [to 12 September 2015]
http://www.iavi.org/press-releases/2015
IAVI and CureVac Partner to Accelerate Development and Testing of AIDS Vaccine Candidates
Novel HIV immunogens to be delivered via novel mRNA platform
NEW YORK, USA, AND TÜBINGEN, GERMANY, 10 September 2015 – The non-profit International AIDS Vaccine Initiative (IAVI) and biopharmaceutical company CureVac are partnering to accelerate the development of AIDS vaccines, utilizing novel immunogens developed by IAVI and partners, delivered via CureVac's novel messenger RNA (mRNA) technology.

HIV's envelope protein or "trimer" is the primary target for antibodies that can neutralize a wide range of the virus' strains, and which hold enormous promise in the quest for efficacious and broadly applicable AIDS vaccines. In a major breakthrough, researchers have recently designed immunogens that successfully mimic this trimer.

In this collaboration, IAVI has selected one of its leading HIV trimer constructs to launch the mRNA evaluation in small-scale clinical trials: mRNA that encodes for the chosen trimer mimic will be constructed using CureVac's RNActive® technology and injected with the aim of stimulating the body to produce HIV trimer proteins and then related neutralizing antibodies. To date, most AIDS vaccine candidates have been based on DNA, viral vectors or protein. Using mRNA could accelerate the development and testing of AIDS vaccine candidates.

"This collaboration could be a real game-changer," said IAVI Chief Scientific Officer Wayne Koff. "The development of vaccines that can generate neutralizing antibodies against HIV is a top priority for IAVI and many other researchers. Researchers at IAVI's Neutralizing Antibody Center at The Scripps Research Institute and elsewhere have designed several novel immunogens that have the potential to elicit such antibodies. We are very hopeful that using mRNA will enable us to develop and test these immunogens comparatively quickly, saving both time and money."…

PATH [to 12 September 2015]
http://www.path.org/news/index.php
Announcement
PATH joins leading global health organizations in calling for inclusion of research and development indicators in Sustainable Development Goal framework

Posted September 8, 2015.

As global leaders are set to adopt the Sustainable Development Goals (SDGs) later this month, PATH joined a group of leading global health organizations in commissioning a report that calls for the United Nations (UN) and its Member States to strengthen the SDG health targets by including indicators to measure global health research and development (R&D) progress. The report—Measuring global health R&D for the post-2015 development agenda—includes a short list of recommended global health R&D indicators for inclusion in the global and national SDG monitoring frameworks.

From the partner announcement:

The report underscores the critical link between global health R&D and achieving the SDGs. It notes that the SDGs include ambitious targets for reducing child and maternal deaths and ending the epidemics of HIV/AIDS, tuberculosis, malaria, and neglected tropical diseases, but existing global strategies that align with these targets clearly acknowledge they cannot be achieved without the development and delivery of new and improved drugs, vaccines, diagnostics, and other health tools. While the SDGs include a means of implementation target (target 3.b) to support R&D for vaccines and medicines for diseases primarily impacting developing countries, none of the official UN indicator proposals include any indicators to measure progress on the global health R&D needed to meet this and other health targets.

To fill this gap and ensure the SDGs generate the innovations needed to reach the health targets, the report proposes three indicators to measure global health R&D for inclusion in the SDG global monitoring framework, as well as five additional indicators countries are encouraged to include in their national monitoring frameworks if appropriate for their circumstances. These indicators were recommended based on an extensive landscaping and consultative process to identify health R&D indicators and further analysis to refine this list based on feasibility, level of community endorsement, appropriateness, and cross-cutting potential.

The report was prepared by Policy Cures and commissioned by the Council on Health Research for Development (COHRED), the Foundation for Innovative New Diagnostics (FIND), the Global Health Technologies Coalition (GHTC), the International AIDS Vaccine Initiative (IAVI), the Medicines for Malaria Venture (MMV), PATH, and the TB Alliance to inform stakeholders of the importance of including robust indicators for global health R&D and advise on the most suitable indicators for inclusion.

BMGF - Gates Foundation [to 12 September 2015]
http://www.gatesfoundation.org/Media-Center/Press-Releases
SEPTEMBER 09, 2015

Bill & Melinda Gates Foundation Opens 16th Round of Grand Challenges Explorations

Seeking great ideas for understanding antimicrobial resistance, improving newborn gut health, measuring digital financial services, and other global health and development priorities.

NIH [to 12 September 2015]
http://www.nih.gov/news/releases.htm

NIMHD welcomes nine new members to the National Advisory Council on Minority Health and Health Disparities

September 10, 2015 — Members of the council are drawn from the scientific, medical, and lay communities.

MSF/Médecins Sans Frontières [to 12 September 2015]
http://www.doctorswithoutborders.org/news-stories/press/press-releases
The 2015 Lasker-Bloomberg Public Service Award:
Médecins Sans Frontières (Doctors Without Borders) for Sustained and Effective Frontline Responses to the Recent Ebola Outbreak in Africa

The 2015 Lasker~Bloomberg Public Service Award honors Médecins Sans Frontières (Doctors Without Borders), established in 1971, for bold leadership in responding to the recent Ebola outbreak in Africa, and for sustained and effective frontline responses to health emergencies.

Since the beginning of the most recent Ebola outbreak in West Africa in March 2014, more than 11,000 people lost their lives, including hundreds of health workers. MSF leaders realized quickly the devastating magnitude of the outbreak and sprang into action. The organization sent experts, built hospitals, imported necessary supplies, and set up systems to receive and treat patients. For many months, MSF was alone in its work. When other international organizations later began stepping up, MSF provided guidelines and trained many of their personnel.

Throughout the Ebola crisis, MSF led a call for governments and international organizations to provide trained medical personnel and set up a system for disaster response. In May, the World Health Organization and its constituent countries announced that it would create a $100M fund that will support an international rapid response system for future outbreaks.

Since its inception, MSF has tackled the world's most overwhelming disasters that affect our planet's most marginalized people, and its activities during the last 18 months have demonstrated its exceptional perseverance and effectiveness.

Industry Watch [to 12 September 2015]
:: **PhRMA Reports 836 Medicines and Vaccines in Development to Treat Cancer**
WASHINGTON (September 10, 2015) — America's biopharmaceutical research companies are currently working to develop 836 medicines and vaccines to treat a broad range of cancers, according to a new report released today by the Pharmaceutical Research and Manufacturers of America (PhRMA) that highlights the American Association for Cancer Research (AACR) annual Cancer Progress Report.
:: **Visterra, Inc. and Serum Institute of India Ltd. Announce Collaboration to Advance VIS513, a Monoclonal Antibody in Development for the Treatment of Dengue, in the Indian Subcontinent**
September 09, 2015

CAMBRIDGE, Mass. & PUNE, India--(BUSINESS WIRE)--Visterra, Inc., a clinical-stage biotechnology company that uses its proprietary technology platform to identify unique disease targets and design novel therapeutics for infectious diseases, and Serum Institute of India Ltd. (Serum Institute), a global leader in vaccine development and manufacturing, today announced that the companies have entered into a license agreement for the development, manufacture and commercialization of VIS513 in the Indian subcontinent countries.

"Serum Institute has a proven track record in developing novel biological products and expansive commercialization capabilities in the Indian subcontinent, which makes them the ideal partner."

VIS513 is Visterra's humanized monoclonal antibody that was designed to bind and potently neutralize all four serotypes of dengue virus and was engineered using Visterra's innovative and

proprietary HierotopeTM technology. Preclinical studies of VIS513 have demonstrated a rapid reduction in viral titers after a single systemic administration, which supports its continued development as a single administration for the treatment of dengue virus infection.

Under the terms of the agreement, Serum Institute receives an exclusive license to VIS513 for the Indian subcontinent, including India, Pakistan, Bangladesh, Nepal, Bhutan, Maldives, and Sri Lanka…

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Aeras [to 12 September 2015]
http://www.aeras.org/pressreleases
No new digest content identified

Sabin Vaccine Institute [to 12 September 2015]
http://www.sabin.org/updates/pressreleases
No new digest content identified

IVI [to 12 September 2015]
http://www.ivi.org/web/www/home
No new digest content identified

European Vaccine Initiative [to 12 September 2015]
http://www.euvaccine.eu/news-events
No new digest content identified

FDA [to 12 September 2015]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
No new digest content identified

European Medicines Agency [to 12 September 2015]
http://www.ema.europa.eu/ema/
No new digest content identified

Global Fund [to 12 September 2015]
http://www.theglobalfund.org/en/mediacenter/newsreleases/
No new digest content identified.

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

Vaccines and Global Health: The Week in Review has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health,

health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

Child Mortality Rates Plunge by More Than Half Since 1990 but Global MDG Target Missed by Wide Margin

16,000 children under 5 years old die each day

NEW YORK/GENEVA/WASHINGTON, 9 September 2015 – Child mortality rates have plummeted to less than half of what they were in 1990, according to a new report released today. Under-five deaths have dropped from 12.7 million per year in 1990 to 5.9 million in 2015. This is the first year the figure has gone below the 6 million mark.

New estimates in Levels and Trends in Child Mortality Report 2015 released by UNICEF, the World Health Organization, the World Bank Group, and the Population Division of UNDESA, indicate that although the global progress has been substantial, 16,000 children under five still die every day. And the 53 per cent drop in under-five mortality is not enough to meet the Millennium Development Goal of a two-thirds reduction between 1990 and 2015.

"We have to acknowledge tremendous global progress, especially since 2000 when many countries have tripled the rate of reduction of under-five mortality," said UNICEF Deputy Executive Director Geeta Rao Gupta. "But the far too large number of children still dying from preventable causes before their fifth birthday – and indeed within their first month of life – should impel us to redouble our efforts to do what we know needs to be done. We cannot continue to fail them."

The report notes that the biggest challenge remains in the period at or around birth. A massive 45 per cent of under-five deaths occur in the neonatal period – the first 28 days of life. Prematurity, pneumonia, complications during labour and delivery, diarrhoea, sepsis, and malaria are leading causes of deaths of children under 5 years old. Nearly half of all under-five deaths are associated with undernutrition.

However, most child deaths are easily preventable by proven and readily available interventions. The rate of reduction of child mortality can speed up considerably by concentrating on regions with the highest levels – sub-Saharan Africa and Southern Asia – and ensuring a targeted focus on newborns.

"We know how to prevent unnecessary newborn mortality. Quality care around the time of childbirth including simple affordable steps like ensuring early skin-to-skin contact, exclusive breastfeeding and extra care for small and sick babies can save thousands of lives every year," noted Dr Flavia Bustreo, Assistant Director General at WHO. "The Global Strategy for Women's, Children's and Adolescents' Health, to be launched at the UN General Assembly this month, will be a major catalyst for giving all newborns the best chance at a healthy start in life."

The report highlights that a child's chance of survival is still vastly different based on where he or she is born. Sub-Saharan Africa has the highest under-five mortality rate in the world with 1 child in 12 dying before his or her fifth birthday – more than 12 times higher than the 1 in 147 average in high-income countries. In 2000-2015, the region has overall accelerated its annual rate of reduction of under-five mortality to about two and a half times what it was in 1990-

2000. Despite low incomes, Eritrea, Ethiopia, Liberia, Madagascar, Malawi, Mozambique, Niger, Rwanda, Uganda, and Tanzania have all met the MDG target.

Sub-Saharan Africa as a whole, however, continues to confront the immense challenge of a burgeoning under-five population – projected to increase by almost 30 per cent in the next 15 years – coupled with persistent poverty in many countries.

"This new report confirms a key finding of the 2015 Revision of the World Population Prospects on the remarkable decline in child mortality globally during the 15-year MDG era," said UN Under-Secretary-General for Economic and Social Affairs Mr. Wu Hongbo. "Rapid improvements since 2000 have saved the lives of millions of children. However, this progress will need to continue and even accelerate further, especially in high-mortality countries of sub-Saharan Africa, if we are to reach the proposed child survival target of the 2030 Agenda for Sustainable Development."

"Many countries have made extraordinary progress in cutting their child mortality rates. However, we still have much to do before 2030 to ensure that all women and children have access to the care they need," said Dr Tim Evans, Senior Director of Health, Nutrition and Population at the World Bank Group. "The recently launched Global Financing Facility in Support of Every Woman Every Child with its focus on smarter, scaled and sustainable financing will help countries deliver essential health services and accelerate reductions in child mortality."

Among the report's findings:

:: Roughly one-third of the world's countries – 62 in all – have actually met the MDG target to reduce under-five mortality by two-thirds, while another 74 have reduced rates by at least half.

:: The world as a whole has been accelerating progress in reducing under-five mortality – its annual rate of reduction increased from 1.8 per cent in 1990-2000 to 3.9 per cent in 2000-2015.

:: 10 of the 12 low income countries which have reduced under-five mortality rates by at least two-thirds are in Africa.

:: 5 in 10 global under-five deaths occur in sub-Saharan Africa and another 3 in 10 occur in Southern Asia.

:: 45 per cent of all under-five deaths happen during the first 28 days of life. 1 million neonatal deaths occur on the day of birth, and close to 2 million children die in the first week of life.

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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

The American Journal of Bioethics
Volume 15, Issue 9, 2015
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

American Journal of Infection Control
September 2015 Volume 43, Issue 9, p905-1026, e47-e59
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
September 2015 Volume 49, Issue 3 , Supplement 2, S125-S218
http://www.ajpmonline.org/current
Theme: Evidence-Based Behavioral Counseling Interventions as Clinical Preventive Services: Perspectives of Researchers, Funders, and Guideline Developers
Edited by Robert J. McNellis, Susan J. Curry
[Reviewed earlier]

American Journal of Public Health
Volume 105, Issue 9 (September 2015)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
September 2015; 93 (3)
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
1 September 2015, Vol. 163. No. 5
http://annals.org/issue.aspx
[Reviewed earlier]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 12 September 2015)

Research article

Maternal health care use among married women in Hossaina, Ethiopia

Zeleke Dutamo, Nega Assefa, Gudina Egata BMC Health Services Research 2015, 15:365 (10 September 2015)

Abstract

Background

Pregnancy and child birth are natural process of continuity of life. For many it is a normal process, for some it puts life at risk impending complications. Provision of skilled care for all women before, during, and after childbirth is a key in saving women's life and ensuring delivery of healthy baby. Maternal health service drop-out through the course of pregnancy is widely claimed, yet by how much it is dropped is not known. The main aim of this study was to identify the use of maternal health service over the course of pregnancy and child birth in a comprehensive manner.

Methods

A community based cross-sectional quantitative study on 623 women supported by qualitative inquiry was conducted Hossaian town, South Ethiopia during January 1–31, 2014. A structured questionnaire was used to generate the quantitative data and 4 Focus Group Discussions (FGD) were carried out to support the finding. Multiple logistic regression was used to control the effect of confounding. Odds ratios with 95 % CI used to display the result of analysis. Data generated from the FGD was analyzed using thematic analysis.

Results

The study revealed that 87.6 % of women attended at least one antenatal care (ANC). Among 546 women who attended ANC, 61.3 % of the women made their first visit during second and third trimester of pregnancy and 49 % had less than four antenatal visits. The study also revealed that 62.6 % of deliveries were assisted by skilled attendants and 51.4 % of the women received at least one postnatal check-up. Parity, pregnancy intention and awareness on danger signs of pregnancy during pregnancy were significantly associated ($p < 0.05$) with ANC usage. Skilled delivery attendance was significantly associated with some socio-demographic, economic and obstetric factors. Average family monthly income, awareness on obstetric danger signs of pregnancy during recent pregnancy, and frequency of ANC were positive predictors of Postnatal Care (PNC) utilization.

Conclusions

Though use of maternal health care services is relatively higher, however, it is not adequate. Engaging women in their own reproductive health affairs, strengthening maternal health care, increasing community awareness about obstetric danger signs during pregnancy and child birth, and telling the benefit of family planning should be major targets for intervention.

BMC Infectious Diseases

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

(Accessed 12 September 2015)

[No new relevant content identified]

BMC Medical Ethics

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

(Accessed 12 September 2015)

Debate

Informed consent in paediatric critical care research – a South African perspective

Brenda Morrow, Andrew Argent, Sharon Kling BMC Medical Ethics 2015, 16:62 (9 September 2015)

Abstract

Background

Medical care of critically ill and injured infants and children globally should be based on best research evidence to ensure safe, efficacious treatment. In South Africa and other low and middle-income countries, research is needed to optimise care and ensure rational, equitable allocation of scare paediatric critical care resources.

Ethical oversight is essential for safe, appropriate research conduct. Informed consent by the parent or legal guardian is usually required for child research participation, but obtaining consent may be challenging in paediatric critical care research. Local regulations may also impede important research if overly restrictive.

By narratively synthesising and contextualising the results of a comprehensive literature review, this paper describes ethical principles and regulations; potential barriers to obtaining prospective informed consent; and consent options in the context of paediatric critical care research in South Africa.

Discussion

Voluntary prospective informed consent from a parent or legal guardian is a statutory requirement for child research participation in South Africa. However, parents of critically ill or injured children might be incapable of or unwilling to provide the level of consent required to uphold the ethical principle of autonomy. In emergency care research it may not be practical to obtain consent when urgent action is required. Therapeutic misconceptions and sociocultural and language issues are also barriers to obtaining valid consent.

Alternative consent options for paediatric critical care research include a waiver or deferred consent for minimal risk and/or emergency research, whilst prospective informed consent is appropriate for randomised trials of novel therapies or devices.

Summary

We propose that parents or legal guardians of critically ill or injured children should only be approached to consent for their child's participation in clinical research when it is ethically justifiable and in the best interests of both child participant and parent. Where appropriate, alternatives to prospective informed consent should be considered to ensure that important paediatric critical care research can be undertaken in South Africa, whilst being cognisant of research risk. This document could provide a basis for debate on consent options in paediatric critical care research and contribute to efforts to advocate for South African law reform.

Debate

Obligations of low income countries in ensuring equity in global health financing

John Barugahare, Reidar Lie BMC Medical Ethics 2015, 16:59 (8 September 2015)

Abstract

Background

Despite common recognition of joint responsibility for global health by all countries particularly to ensure justice in global health, current discussions of countries' obligations for global health largely ignore obligations of developing countries. This is especially the case with regards to obligations relating to health financing. Bearing in mind that it is not possible to achieve justice in global health without achieving equity in health financing at both domestic and global levels, our aim is to show how fulfilling the obligation we propose will make it easy to achieve equity in health financing at both domestic and international levels.

Discussion
Achieving equity in global health financing is a crucial step towards achieving justice in global health. Our general view is that current discussions on global health equity largely ignore obligations of Low Income Country (LIC) governments and we recommend that these obligations should be mainstreamed in current discussions. While we recognise that various obligations need to be fulfilled in order to ultimately achieve justice in global health, for lack of space we prioritise obligations for health financing. Basing on the evidence that in most LICs health is not given priority in annual budget allocations, we propose that LIC governments should bear an obligation to allocate a certain minimum percent of their annual domestic budget resources to health, while they await external resources to supplement domestic ones. We recommend and demonstrate a mechanism for coordinating this obligation so that if the resulting obligations are fulfilled by both LIC and HIC governments it will be easy to achieve equity in global health financing.
Summary
Although achieving justice in global health will depend on fulfilment of different categories of obligations, ensuring inter- and intra-country equity in health financing is pivotal. This can be achieved by requiring all LIC governments to allocate a certain optimal per cent of their domestic budget resources to health while they await external resources to top up in order to cover the whole cost of the minimum health opportunities for LIC citizens.

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 12 September 2015)
Research article
Reasons for home delivery and use of traditional birth attendants in rural Zambia: a qualitative study
Cephas Sialubanje, Karlijn Massar, Davidson Hamer, Robert Ruiter BMC Pregnancy and Childbirth 2015, 15:216 (11 September 2015)
Abstract
Background
Despite the policy change stopping traditional birth attendants (TBAs) from conducting deliveries at home and encouraging all women to give birth at the clinic under skilled care, many women still give birth at home and TBAs are essential providers of obstetric care in rural Zambia. The main reasons for pregnant women's preference for TBAs are not well understood. This qualitative study aimed to identify reasons motivating women to giving birth at home and seek the help of TBAs. This knowledge is important for the design of public health interventions focusing on promoting facility-based skilled birth attendance in Zambia.
Methods
We conducted ten focus group discussions (n = 100) with women of reproductive age (15–45 years) in five health centre catchment areas with the lowest institutional delivery rates in the district. In addition, a total of 30 in-depth interviews were conducted comprising 5 TBAs, 4 headmen, 4 husbands, 4 mothers, 4 neighbourhood health committee (NHC) members, 4 community health workers (CHWs) and 5 nurses. Perspectives on TBAs, the decision-making process regarding home delivery and use of TBAs, and reasons for preference of TBAs and their services were explored.
Results

Our findings show that women's lack of decision- making autonomy regarding child birth, dependence on the husband and other family members for the final decision, and various physical and socioeconomic barriers including long distances, lack of money for transport and the requirement to bring baby clothes and food while staying at the clinic, prevented them from delivering at a clinic. In addition, socio-cultural norms regarding childbirth, negative attitude towards the quality of services provided at the clinic, made most women deliver at home. Moreover, most women had a positive attitude towards TBAs and perceived them to be respectful, skilled, friendly, trustworthy, and available when they needed them.
Conclusion
Our findings suggest a need to empower women with decision-making skills regarding childbirth and to lower barriers that prevent them from going to the health facility in time. There is also need to improve the quality of existing facility-based delivery services and to strengthen linkages between TBAs and the formal health system.

BMC Public Health
http://www.biomedcentral.com/bmcpublichealth/content
(Accessed 12 September 2015)
Research article
Implementation of an HPV vaccination program in Eldoret, Kenya: results from a qualitative assessment by key stakeholders
Heleen Vermandere, Violet Naanyu, Olivier Degomme, Kristien Michielsen BMC Public Health 2015, 15:875 (10 September 2015)
Abstract
Background
Cervical cancer strikes hard in low-resource regions yet primary prevention is still rare. Pilot projects have however showed that Human Papillomavirus (HPV) vaccination programs can attain high uptake. Nevertheless, a study accompanying a vaccination demonstration project in Eldoret, Kenya, revealed less encouraging outcomes: uptake during an initial phase targeting ten schools (i.e., 4000 eligible girls), was low and more schools had to be included to reach the proposed number of 3000 vaccinated girls. The previously conducted study also revealed that many mothers had not received promotional information which had to reach them through schools: teachers were sensitized by health staff and asked to invite students and parents for HPV vaccination in the referral hospital. In this qualitative study, we investigate factors that hampered promotion and vaccine uptake.
Methods
Focus group discussions (FGD) with teachers (4) and fathers (3) were organized to assess awareness and attitudes towards the vaccination program, cervical cancer and the HPV vaccine, as well as a FGD with the vaccinators (1) to discuss the course of the program and potential improvements. Discussions were recorded, transcribed, translated, and analyzed using thematic analysis In addition, a meeting with the program coordinator was set up to reflect upon the program and the results of the FGD, and to formulate recommendations for future programs.
Results
Cervical cancer was poorly understood by fathers and teachers and mainly linked with nonconforming sexual behavior and modern lifestyle. Few had heard about the vaccination opportunity: feeling uncomfortable to discuss cervical cancer and not considering it as important had hampered information flow. Teachers requested more support from health staff to address unexpected questions from parents. Non-uptake was also the result of distrust

towards new vaccines. Schools entering the program in the second phase reacted faster: they were better organized, e.g., in terms of transport, while the community was already more familiarized with the vaccine.
Conclusions
Close collaboration between teachers and health staff is crucial to obtain high HPV vaccine uptake among schoolgirls. Promotional messages should, besides providing correct information, tackle misbeliefs, address stigma and stress the priority to vaccinate all, regardless of lifestyle. Monitoring activities and continuous communication could allow for detection of rumors and unequal uptake in the community.

Debate

Strategies to increase demand for maternal health services in resource-limited settings: challenges to be addressed

Khalifa Elmusharaf, Elaine Byrne, Diarmuid O'Donovan BMC Public Health 2015, 15:870 (8 September 2015)

Abstract
Background
Universal health access will not be achieved unless women are cared for in their own communities and are empowered to take decisions about their own health in a supportive environment. This will only be achieved by community-based demand side interventions for maternal health access. In this review article, we highlight three common strategies to increase demand-side barriers to maternal healthcare access and identify the main challenges that still need to be addressed for these strategies to be effective.
Discussion
Common demand side strategies can be grouped into three categories:(i) Financial incentives/subsidies; (ii) Enhancing patient transfer, and; (iii) Community involvement. The main challenges in assessing the effectiveness or efficacy of these interventions or strategies are the lack of quality evidence on their outcome and impact and interventions not integrated into existing health or community systems. However, what is highlighted in this review and overlooked in most of the published literature on this topic is the lack of knowledge about the context in which these strategies are to be implemented.
Summary
We suggest three challenges that need to be addressed to create a supportive environment in which these demand-side strategies can effectively improve access to maternal health services. These include: addressing decision-making norms, engaging in intergenerational dialogue, and designing contextually appropriate communication strategies.

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 12 September 2015)
[No new relevant content identified]

BMJ Open
2015, Volume 5, Issue 9
http://bmjopen.bmj.com/content/current
[Reviewed earlier]

British Medical Journal
28 August 2015 (vol 351, issue 8024)
http://www.bmj.com/content/351/8024
Editorials
Europe's refugee crisis: an urgent call for moral leadership
BMJ 2015; 351 doi: http://dx.doi.org/10.1136/bmj.h4833 (Published 09 September 2015) Cite this as: BMJ 2015;351:h4833
Kamran Abbasi, international editor, The BMJ,
Kiran Patel, consultant cardiologist, Heart of England NHS Trust,
Fiona Godlee, editor in chief, The BMJ
Offering asylum is a minimum standard of civilised society

Europe's refugee crisis is the greatest test of humanity faced by the world's rich countries this century. It isn't a new crisis. Nor was it difficult for politicians to anticipate. Refugees have fled to Europe since at least the premature optimism of the Arab Spring in 2011. Today, optimism is replaced by desperation, a promise of freedom overshadowed by death. Western nations rushed to support the democratic principles of the Arab Spring yet are reluctant to address the root causes and the consequences, which include civil war and state brutality, most notably in Syria. Oil rich Arab States have played their part by allowing political oppression and conflict to flourish in their region. A funding crisis in UN organisations is affecting the humanitarian effort in the Middle East, driving refugees to Europe in greater numbers.1 Ignoring injustice and inequity in poorer countries and in areas of conflict has not prevented the consequences reaching the shores and borders of the rich world…

Research
Effect of bivalent human papillomavirus vaccination on pregnancy outcomes: long term observational follow-up in the Costa Rica HPV Vaccine Trial
BMJ 2015; 351 doi: http://dx.doi.org/10.1136/bmj.h4358 (Published 07 September 2015) Cite this as: BMJ 2015;351:h4358
Orestis A Panagiotou, researcher1, Brian L Befano, senior programmer2, Paula Gonzalez, investigator34, Ana Cecilia Rodríguez, investigator3, Rolando Herrero, group head4, John T Schiller, senior investigator5, Aimée R Kreimer, investigator1, Mark Schiffman, senior investigator1, Allan Hildesheim, senior investigator1, Allen J Wilcox, senior investigator6, Sholom Wacholder, senior investigator1
on behalf of the Costa Rica HPV Vaccine Trial (CVT) Group (see end of manuscript for full list of investigators)
Abstract
Objective
To examine the effect of the bivalent human papillomavirus (HPV) vaccine on miscarriage.
Design
Observational long term follow-up of a randomized, double blinded trial combined with an independent unvaccinated population based cohort.
Setting S
ingle center study in Costa Rica.
Participants
7466 women in the trial and 2836 women in the unvaccinated cohort enrolled at the end of the randomized trial and in parallel with the observational trial component.

Intervention Women in the trial were assigned to receive three doses of bivalent HPV vaccine (n=3727) or the control hepatitis A vaccine (n=3739). Crossover bivalent HPV vaccination occurred in the hepatitis A vaccine arm at the end of the trial. Women in the unvaccinated cohort received (n=2836) no vaccination.
Main outcome measure
Risk of miscarriage, defined by the US Centers for Disease Control and Prevention as fetal loss within 20 weeks of gestation, in pregnancies exposed to bivalent HPV vaccination in less than 90 days and any time from vaccination compared with pregnancies exposed to hepatitis A vaccine and pregnancies in the unvaccinated cohort.
Results
Of 3394 pregnancies conceived at any time since bivalent HPV vaccination, 381 pregnancies were conceived less than 90 days from vaccination. Unexposed pregnancies comprised 2507 pregnancies conceived after hepatitis A vaccination and 720 conceived in the unvaccinated cohort. Miscarriages occurred in 451 (13.3%) of all exposed pregnancies, in 50 (13.1%) of the pregnancies conceived less than 90 days from bivalent HPV vaccination, and in 414 (12.8%) of the unexposed pregnancies, of which 316 (12.6%) were in the hepatitis A vaccine group and 98 (13.6%) in the unvaccinated cohort. The relative risk of miscarriage for pregnancies conceived less than 90 days from vaccination compared with all unexposed pregnancies was 1.02 (95% confidence interval 0.78 to 1.34, one sided P=0.436) in unadjusted analyses. Results were similar after adjusting for age at vaccination (relative risk 1.15, one sided P=0.17), age at conception (1.03, P=0.422), and calendar year (1.06, P=0.358), and in stratified analyses. Among pregnancies conceived at any time from bivalent HPV vaccination, exposure was not associated with an increased risk of miscarriage overall or in subgroups, except for miscarriages at weeks 13-20 of gestation (relative risk 1.35, 95% confidence interval 1.02 to 1.77, one sided P=0.017).
Conclusions
There is no evidence that bivalent HPV vaccination affects the risk of miscarriage for pregnancies conceived less than 90 days from vaccination. The increased risk estimate for miscarriages in a subgroup of pregnancies conceived any time after vaccination may be an artifact of a thorough set of sensitivity analyses, but since a genuine association cannot totally be ruled out, this signal should nevertheless be explored further in existing and future studies.
Trial registration
Clinicaltrials.gov NCT00128661 and NCT01086709.

Bulletin of the World Health Organization
Volume 93, Number 9, September 2015, 589-664
http://www.who.int/bulletin/volumes/93/9/en/
[Reviewed earlier]

Clinical Infectious Diseases (CID)
Volume 61 Issue 7 October 1, 2015
http://cid.oxfordjournals.org/content/current
[Reviewed earlier]

Clinical Therapeutics

September 2015 Volume 37, Issue 9, p1873-2150
http://www.clinicaltherapeutics.com/current
[New issue; No relevant content identified]

Complexity
July/August 2015 Volume 20, Issue 6 Pages C1–C1, 1–97
http://onlinelibrary.wiley.com/doi/10.1002/cplx.v20.6/issuetoc
[Reviewed earlier]

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 12 September 2015]
[No new content]

Contemporary Clinical Trials
Volume 44, In Progress (September 2015)
http://www.sciencedirect.com/science/journal/15517144/44
[No new relevant content]

Cost Effectiveness and Resource Allocation
http://www.resource-allocation.com/
(Accessed 12 September 2015)
[No new relevant content]

Current Opinion in Infectious Diseases
October 2015 - Volume 28 - Issue 5 pp: v-vi,397-496
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
A systems biology approach for diagnostic and vaccine antigen discovery in tropical infectious diseases
Liang, Li; Felgner, Philip L.
Abstract
Purpose of review:
There is a need for improved diagnosis and for more rapidly assessing the presence, prevalence, and spread of newly emerging or reemerging infectious diseases. An approach to the pathogen-detection strategy is based on analyzing host immune response to the infection. This review focuses on a protein microarray approach for this purpose.
Recent findings:
Here we take a protein microarray approach to profile the humoral immune response to numerous infectious agents, and to identify the complete antibody repertoire associated with each disease. The results of these studies lead to the identification of diagnostic markers and potential subunit vaccine candidates. These results from over 30 different organisms can also provide information about common trends in the humoral immune response.
Summary:

This review describes the implications of the findings for clinical practice or research. A systems biology approach to identify the antibody repertoire associated with infectious diseases challenge using protein microarray has become a powerful method in identifying diagnostic markers and potential subunit vaccine candidates, and moreover, in providing information on proteomic feature (functional and physically properties) of seroreactive and serodiagnostic antigens. Combining the detection of the pathogen with a comprehensive assessment of the host immune response will provide a new understanding of the correlations between specific causative agents, the host response, and the clinical manifestations of the disease.

Developing World Bioethics
August 2015 Volume 15, Issue 2 Pages ii–iii, 59–114
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2015.15.issue-2/issuetoc
[Reviewed earlier]

Development in Practice
Volume 25, Issue 6, 2015
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Emerging Infectious Diseases
Volume 21, Number 9—September 2015
http://wwwnc.cdc.gov/eid/
THEME ISSUE – Emerging Infections Program
Emerging Infections Program—20 Years of Achievements and Future Prospects
Ruth Lynfield ✉ and William Schaffner
Excerpt
…This issue of Emerging Infectious Diseases marks the 20th anniversary of the EIP. Sponsored and organized by the Centers for Disease Control and Prevention (CDC), the EIP is a multifaceted collaboration of CDC with 10 state health departments and their academic partners, with the goal of conducting a portfolio of work that can be characterized as enhanced public health surveillance and applied research to detect, prevent, and control emerging infectious diseases. Collaboration derives from the Latin word "collaboratus," meaning to labor together. The collaboration has been profound and successful, with marked commitment, creativity, and passion contributed by all participants…

Monitoring Effect of Human Papillomavirus Vaccines in US Population, Emerging Infections Program, 2008–2012 PDF Version [PDF - 474 KB - 5 pages]
S. Hariri et al.
Summary
Methods for surveillance of cervical precancers and associated types were developed to monitor effect of HPV vaccination.

Tracking Pertussis and Evaluating Control Measures through Enhanced Pertussis Surveillance, Emerging Infections Program, United States PDF Version [PDF - 541 KB - 6 pages]

T. H. Skoff et al.
Summary
This network can improve pertussis prevention and control and be a model for surveillance programs.

Epidemics
Volume 13, In Progress (December 2015)
http://www.sciencedirect.com/science/journal/17554365
[Reviewed earlier]

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Volume 143 - Issue 14 - October 2015
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[New issue; No relevant content identified]

The European Journal of Public Health
Volume 25, Issue 4, 12 September 2015
http://eurpub.oxfordjournals.org/content/25/4
[Reviewed earlier]

Eurosurveillance
Volume 20, Issue 36, 10 September 2015
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Surveillance report
Effectiveness of seasonal influenza vaccine in preventing laboratory-confirmed influenza in primary care in the United Kingdom: 2014/15 end of season results
by R Pebody, F Warburton, N Andrews, J Ellis, B von Wissmann, C Robertson, I Yonova, S Cottrell, N Gallagher, H Green, C Thompson, M Galiano, D Marques, R Gunson, A Reynolds, C Moore, D Mullett, S Pathirannehelage, M Donati, J Johnston, S de Lusignan, J McMenamin, M Zambon

Global Health: Science and Practice (GHSP)
June 2015 | Volume 3 | Issue 2
http://www.ghspjournal.org/content/current
[Reviewed earlier]

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[Accessed 12 September 2015]
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Volume 10, Issue 8, 2015
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[Reviewed earlier]

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http://www.globalizationandhealth.com/
[Accessed 12 September 2015]
[No new content]

Health Affairs
September 2015; Volume 34, Issue 9
http://content.healthaffairs.org/content/current
Issue Theme: Noncommunicable Diseases: The Growing Burden
Achieving Effective Universal Health Coverage And Diagonal Approaches To Care For Chronic Illnesses
Felicia Marie Knaul1,*, Afsan Bhadelia2, Rifat Atun3 and Julio Frenk4
Author Affiliations
1Felicia Marie Knaul (fknaul@gmail.com) is director of the Miami Institute for the Americas and professor at the Miller School of Medicine, University of Miami, in Florida. At the time this research was conducted, she was director of the Harvard Global Equity Initiative, in Boston, Massachusetts.
2Afsan Bhadelia is a research associate at the Harvard Global Equity Initiative.
3Rifat Atun is a professor of global health systems in the Department of Global Health and Population at the Harvard School of Public Health.
4Julio Frenk is president of the University of Miami, in Florida. At the time this research was conducted, he was dean of the Harvard School of Public Health.
*Corresponding author
Abstract
Health systems in low- and middle-income countries were designed to provide episodic care for acute conditions. However, the burden of disease has shifted to be overwhelmingly dominated by chronic conditions and illnesses that require health systems to function in an integrated manner across a spectrum of disease stages from prevention to palliation. Low- and middle-income countries are also aiming to ensure health care access for all through universal health coverage. This article proposes a framework of effective universal health coverage intended to meet the challenge of chronic illnesses. It outlines strategies to strengthen health systems through a "diagonal approach." We argue that the core challenge to health systems is chronicity of illness that requires ongoing and long-term health care. The example of breast cancer within the broader context of health system reform in Mexico is presented to illustrate effective universal health coverage along the chronic disease continuum and across health systems functions. The article concludes with recommendations to strengthen health systems in order to achieve effective universal health coverage.

Cardiovascular Disease Screening By Community Health Workers Can Be Cost-Effective In Low-Resource Countries
Thomas Gaziano1,*, Shafika Abrahams-Gessel2, Sam Surka3, Stephen Sy4, Ankur Pandya5,

Catalina A. Denman6, Carlos Mendoza7, Thandi Puoane8 and Naomi S. Levitt9
Author Affiliations
1Thomas Gaziano (tgaziano@partners.org) is an assistant professor in the Cardiovascular Division of Brigham and Women's Hospital, in Boston, Massachusetts.
2Shafika Abrahams-Gessel is a research manager at the Center for Health Decision Science in the Harvard T. H. Chan School of Public Health, in Boston.
3Sam Surka is a researcher in the Chronic Diseases Initiative for Africa at Old Groote Schuur Hospital, in Cape Town, South Africa.
4Stephen Sy is a programmer at the Center for Health Decision Science in the Harvard T. H. Chan School of Public Health.
5Ankur Pandya is an assistant professor of health policy and management at the Harvard T. H. Chan School of Public Health.
6Catalina A. Denman is a professor in the Centro de Estudios en Salud y Sociedad at El Colegio de Sonora, in Hermosillo, Mexico.
7Carlos Mendoza is a coinvestigator at the Instituto de Nutricion de Centro America y Panama, in Guatemala City, Guatemala.
8Thandi Puoane is a professor in the School of Public Health at the University of the Western Cape, in Bellville, South Africa.
9Naomi S. Levitt is director of the Division of Diabetes and the Chronic Diseases Initiative for Africa, both at Old Groote Schuur Hospital.
*Corresponding author
Abstract
In low-resource settings, a physician is not always available. We recently demonstrated that community health workers—instead of physicians or nurses—can efficiently screen adults for cardiovascular disease in South Africa, Mexico, and Guatemala. In this analysis we sought to determine the health and economic impacts of shifting this screening to community health workers equipped with either a paper-based or a mobile phone–based screening tool. We found that screening by community health workers was very cost-effective or even cost-saving in all three countries, compared to the usual clinic-based screening. The mobile application emerged as the most cost-effective strategy because it could save more lives than the paper tool at minimal extra cost. Our modeling indicated that screening by community health workers, combined with improved treatment rates, would increase the number of deaths averted from 15,000 to 110,000, compared to standard care. Policy makers should promote greater acceptance of community health workers by both national populations and health professionals and should increase their commitment to treating cardiovascular disease and making medications available.

Overcoming Obstacles To Enable Access To Medicines For Noncommunicable Diseases In Poor Countries

Sandeep P. Kishore1,*, Kavitha Kolappa2, Jordan D. Jarvis3, Paul H. Park4, Rachel Belt5, Thirukumaran Balasubramaniam6 and Rachel Kiddell-Monroe7
Author Affiliations
1Sandeep P. Kishore (sunny.kishore@gmail.com) is a fellow at Yale University, in New Haven, Connecticut, and president of the Young Professionals Chronic Disease Network, in Boston, Massachusetts.
2Kavitha Kolappa is a resident in psychiatry at Massachusetts General Hospital, in Boston, a and board member for the Young Professionals Chronic Disease Network.

3Jordan D. Jarvis is executive director of the Young Professionals Chronic Disease Network and a former postgraduate research fellow at the Harvard Global Equity Initiative, in Boston.
4Paul H. Park is director of noncommunicable diseases for Partners in Health—Rwanda and a member of Universities Allied for Essential Medicines, in Washington, D.C.
5Rachel Belt is a member of Universities Allied for Essential Medicines.
6Thirukumaran Balasubramaniam is a Geneva representative at Knowledge Ecology International, in Switzerland.
7Rachel Kiddell-Monroe is a special adviser for the Universities Allied for Essential Medicines, a board member for the Young Professionals Chronic Disease Network, and a member of the International Board for Médecins sans Frontières, in Geneva.
*Corresponding author
Abstract
The modern access-to-medicines movement grew largely out of the civil-society reaction to the HIV/AIDS pandemic three decades ago. While the movement was successful with regard to HIV/AIDS medications, the increasingly urgent challenge to address access to medicines for noncommunicable diseases has lagged behind—and, in some cases, has been forgotten. In this article we first ask what causes the access gap with respect to lifesaving essential noncommunicable disease medicines and then what can be done to close the gap. Using the example of the push for access to antiretrovirals for HIV/AIDS patients for comparison, we highlight the problems of inadequate global financing and procurement for noncommunicable disease medications, intellectual property barriers and concerns raised by the pharmaceutical industry, and challenges to building stronger civil-society organizations and a patient and humanitarian response from the bottom up to demand treatment. We provide targeted policy recommendations, specific to the public sector, the private sector, and civil society, with the goal of improving access to noncommunicable disease medications globally.

Health and Human Rights
Volume 17, Issue 1 June 2015
http://www.hhrjournal.org/
Special Section on Bioethics and the Right to Health
in collaboration with the Dalla Lana School of Public Health, University of Toronto
[Reviewed earlier]

Health Economics, Policy and Law
Volume 10 - Special Issue 04 - October 2015
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
SPECIAL ISSUE: 10th Anniversary Issue

Health Policy and Planning
Volume 30 Issue 7 September 2015
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems

http://www.health-policy-systems.com/content
[Accessed 12 September 2015]
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Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 11, Issue 9, 2015
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

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Issue 64 June 2015
http://www.odihpn.org/humanitarian-exchange-magazine/issue-64
[Reviewed earlier]

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[Accessed 12 September 2015]
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International Health
Volume 7 Issue 12 September 2015
http://inthealth.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Epidemiology
Volume 44 Issue 3 June 2015
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Infectious Diseases
September 2015 Volume 38, In Progress
http://www.ijidonline.com/current
Planning for the Next Global Pandemic
Allen G.P. Ross, Suzanne M. Crowe, Mark W. Tyndall
Corresponding Editor: Eskild Petersen, Aarhus, Denmark
DOI: http://dx.doi.org/10.1016/j.ijid.2015.07.016

Abstract
In order to mitigate human and financial losses as a result of future global pandemics, we must plan now. As the Ebola virus pandemic declines, we must reflect on how we have mismanaged this recent international crisis and how we can better prepare for the next global pandemic. Of great concern is the increasing frequency of pandemics occurring over the last few decades. Clearly, the window of opportunity to act is closing. This editorial discusses many issues including priority emerging and re-emerging infectious diseases; the challenges of meeting international health regulations; the strengthening of global health systems; global pandemic funding; and the One Health approach to future pandemic planning. We recommend that the global health community unites to urgently address these issues in order to avoid the next humanitarian crisis.

Short Communications
Investigating the immunizing effect of the rubella epidemic in Japan, 2012-14
Hiroshi Nishiura, Ryo Kinoshita, Yuichiro Miyamatsu, Kenji Mizumoto
p16–18
Published online: July 13 2015
Epidemiological features and trends of Ebola virus disease in West Africa
Ligui Wang, Guang Yang, Leili Jia, Zhenjun Li, Jing Xie, Peng Li, Shaofu Qiu, Rongzhang Hao, Zhihao Wu, Hui Ma, Hongbin Song
p52–53
Published online: July 24 2015
Probable transmission chains of Middle East respiratory syndrome coronavirus and the multiple generations of secondary infection in South Korea
Shui Shan Lee, Ngai Sze Wong
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JAMA
September 8, 2015, Vol 314, No. 10
http://jama.jamanetwork.com/issue.aspx
Editorial | September 8, 2015
Antenatal Iron Use in Malaria Endemic Settings: Evidence of Safety?
Parul Christian, DrPH, MSc1; Robert E. Black, MD, MPH2
Author Affiliations
JAMA. 2015;314(10):1003-1005. doi:10.1001/jama.2015.10032.
Extract
Anemia related to iron deficiency during pregnancy occurs in 19% of women worldwide and in 20% of women in sub-Saharan Africa.1 Findings from observational studies reveal a linear, inverse relationship between maternal anemia and risk of maternal mortality across the entire distribution of hemoglobin concentrations, although confounding may be an issue.2,3 Severe anemia in pregnancy may result in maternal death due to cardiac failure. The current World Health Organization (WHO) guideline is to provide 30 to 60 mg of elemental iron and 400 µg of folic acid daily throughout pregnancy. This recommendation is mainly based on the proven effects of supplementation in reducing maternal anemia, iron deficiency, and low birth weight.4 In addition, approximately 35 million pregnant women, nearly all of whom live in sub-Saharan Africa, are at risk of Plasmodium falciparum infection annually.5 Across Africa, the prevalence of infection among children aged 2 to 10 years has declined from 26% in 2000 to 14% in 2013.5

Still, in 2013, an estimated 437 000 malaria deaths occurred in children younger than 5 years, representing 83% of all deaths due to malaria in Africa.[5]

Original Investigation | September 8, 2015

Effect of Daily Antenatal Iron Supplementation on Plasmodium Infection in Kenyan Women: A Randomized Clinical Trial

Martin N. Mwangi, PhD1,2; Johanna M. Roth, MSc1,3; Menno R. Smit, MD1; Laura Trijsburg, MSc1; Alice M. Mwangi, PhD4; Ayşe Y. Demir, MD, PhD5; Jos P. M. Wielders, PhD5; Petra F. Mens, PhD3; Jaco J. Verweij, PhD6; Sharon E. Cox, PhD7,8; Andrew M. Prentice, PhD, FMedSci7,8; Inge D. Brouwer, PhD9; Huub F. J. Savelkoul, PhD1; Pauline E. A. Andang'o, PhD2; Hans Verhoef, PhD1,7,8

Author Affiliations

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Abstract

Importance

Anemia affects most pregnant African women and is predominantly due to iron deficiency, but antenatal iron supplementation has uncertain health benefits and can increase the malaria burden.

Objective

To measure the effect of antenatal iron supplementation on maternal Plasmodium infection risk, maternal iron status, and neonatal outcomes.

Design, Setting, and Participants

Randomized placebo-controlled trial conducted October 2011 through April 2013 in a malaria endemic area among 470 rural Kenyan women aged 15 to 45 years with singleton pregnancies, gestational age of 13 to 23 weeks, and hemoglobin concentration of 9 g/dL or greater. All women received 5.7 mg iron/day through flour fortification during intervention, and usual intermittent preventive treatment against malaria was given.

Interventions Supervised daily supplementation with 60 mg of elemental iron (as ferrous fumarate, n = 237 women) or placebo (n = 233) from randomization until 1 month postpartum.

Main Outcomes and Measures

Primary outcome was maternal Plasmodium infection at birth. Predefined secondary outcomes were birth weight and gestational age at delivery, intrauterine growth, and maternal and infant iron status at 1 month after birth.

Results

Among the 470 participating women, 40 women (22 iron, 18 placebo) were lost to follow-up or excluded at birth; 12 mothers were lost to follow-up postpartum (5 iron, 7 placebo). At baseline, 190 of 318 women (59.7%) were iron-deficient. In intention-to-treat analysis, comparison of women who received iron vs placebo, respectively, yielded the following results at birth: Plasmodium infection risk: 50.9% vs 52.1% (crude difference, −1.2%, 95% CI, −11.8% to 9.5%; P = .83); birth weight: 3202 g vs 3053 g (crude difference, 150 g, 95% CI, 56 to 244; P = .002); birth-weight-for-gestational-age z score: 0.52 vs 0.31 (crude difference, 0.21, 95% CI, −0.11 to 0.52; P = .20); and at 1 month after birth: maternal hemoglobin concentration: 12.89 g/dL vs 11.99 g/dL (crude difference, 0.90 g/dL, 95% CI, 0.61 to 1.19; P < .001); geometric mean maternal plasma ferritin concentration: 32.1 µg/L vs 14.4 µg/L (crude difference, 123.4%, 95% CI, 85.5% to 169.1%; P < .001); geometric mean neonatal plasma ferritin concentration: 163.0 µg/L vs 138.7 µg/L (crude difference, 17.5%, 95% CI, 2.4% to 34.8%; P = .02). Serious adverse events were reported for 9 and 12 women who

received iron and placebo, respectively. There was no evidence that intervention effects on Plasmodium infection risk were modified by intermittent preventive treatment use.
Conclusions and Relevance
Among rural Kenyan women with singleton pregnancies, administration of daily iron supplementation, compared with administration of placebo, resulted in no significant differences in overall maternal Plasmodium infection risk. Iron supplementation led to increased birth weight.
Trial Registration clinicaltrials.gov Identifier: NCT01308112

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http://archpedi.jamanetwork.com/issue.aspx
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Vaccination Compliance and the US Measles Epidemic
Tomás Bogardus, PhD
Vaccination Compliance and the US Measles Epidemic
Raymond Leung, MBBS; Maya Munoz, DO
Vaccination Compliance and the US Measles Epidemic
Seth Blumberg, MD, PhD; Wayne T. A. Enanoria, PhD; Travis C. Porco, PhD, MPH
Vaccination Compliance and the US Measles Epidemic—Reply
Maimuna S. Majumder, MPH; Jane E. Huston, MPH; John S. Brownstein, PhD

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Volume 40, Issue 4, August 2015
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October 2015 Volume 167, Issue 4 , Supplement, S1-S50
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Recommended Iron Levels for Nutritional Formulas for Infants (0 – 12 months)
Edited by Ronald E. Kleinman

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Comment
Diaspora engagement in humanitarian emergencies and beyond
Neeraja Nagarajan, Blair Smart, Joseph Nwadiuko
DOI: http://dx.doi.org/10.1016/S0140-6736(15)00071-9

Summary
Migration of health workers from low-income and middle-income countries (LMICs) to high-income countries continues unabated, with substantial effects on the development of health systems in LMICs.1–3 WHO estimates that an additional 4·3 million health-care workers are needed to meet global health-care needs, with acute shortages in LMICs.4 Yet almost 25% of physicians in high-income countries such as the USA, UK, Australia, and Canada are foreign-born and from the very LMICs that face shortages in health-care workforces.

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Original Paper
Decentralizing Maternity Services to Increase Skilled Attendance at Birth and Antenatal Care Utilization in Rural Rwanda: A Prospective Cohort Study
Lisa M. Nathan, Quihu Shi, Kari Plewniak…

Original Paper
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Mary H. Hodges, Fatmata F. Sesay, Habib I. Kamara…

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Carolina Aguiar, Larissa Jennings

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June 2015 Volume 93, Issue 2 Pages 223–445
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[New issue; No relevant content identified]

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September 10, 2015 Vol. 373 No. 11
http://www.nejm.org/toc/nejm/medical-journal
Perspective
Creating a Global Health Risk Framework
Victor J. Dzau, M.D., and Judith Rodin, Ph.D.
N Engl J Med 2015; 373:991-993 September 10, 2015 DOI: 10.1056/NEJMp1509136

The Ebola outbreak in West Africa tragically illustrated the shortcomings of the global health system. Dysfunctional governance structures — within and among institutions and sectors — hindered response efforts. Financial and human resources were slow to arrive and insufficient,[1] as they often are during humanitarian crises. Surveillance and other information systems were not up to the task. Health care personnel risked their lives to provide care, and many died. Local culture was not respected, and mistrust of the health system was rampant.[2] Private industry had little incentive to proactively develop lifesaving products, and when it nevertheless did so, regulatory barriers and poor coordination hindered testing and deployment.[3] The list goes on. As a result, the Ebola outbreak has had catastrophic health, economic, and social effects on Guinea, Liberia, Sierra Leone, and beyond.

Clearly, a unifying framework for managing global public health events is needed. Although previous globally significant outbreaks, such as those of the human immunodeficiency virus, influenza, and the severe acute respiratory syndrome (SARS), highlighted many of these weaknesses, the political will needed to reform the global public health framework has failed. As a result, countless lives have been lost and billions of dollars in economic damage has been incurred. The situation urgently needs to be fixed, and that requires leadership from the highest

levels. We can't allow another epidemiologic crisis to become a full-fledged catastrophe. An independent, multinational Commission on a Global Health Risk Framework for the Future has been established to recommend a more effective global architecture for mitigating the threat of epidemic infectious diseases.[4] The U.S. National Academy of Medicine (formerly the Institute of Medicine) is the secretariat for this commission.

The Global Health Risk Framework (GHRF) initiative will build on lessons from the current Ebola outbreak and other major outbreaks to develop a comprehensive framework for improving our response to future global public health threats. The Commission will rigorously analyze options for improving governance, finance, health system resilience, and research and development for global health security. To foster trust internationally with various levels of government, civil society, academia, and industry, the Commission intends to keep the framework from being influenced by politics or the interests of any one country or organization.

The 18 Commission members have expertise in global health governance; workforce mobilization; global financing, including reinsurance business, economics, and public–private partnerships; information management and disease surveillance; humanitarian and pandemic response; and research, development, acquisition, and distribution. Because preparing for and responding to outbreaks requires more than medical expertise, the Commission also includes lawyers, bankers, mining executives, and others. To ensure the group's independence, the commissioners were screened for conflicts of interest, their evidence collection and analysis will be transparent, and their report will be rigorously peer reviewed.

An international oversight group will steer the initiative and determine the scope of the study, approve the Commission slate and the initiative processes, develop guidelines for the report review process, and assist with dissemination. The initiative also includes workstream planning groups that will oversee preparations for four public information-gathering workshops, involving experts to address governance for global health, financing for public health emergencies, resilient health systems, and research and development of medical products.

The governance-for-global-health workstream will begin with a review of the current responsibilities and constraints of countries, regional institutions, the World Health Organization (WHO), and other relevant United Nations (UN) agencies, as well as the International Health Regulations (IHR), and assessment of potential changes to international governance frameworks that would ensure a robust response capability regardless of the environmental contexts. Possible ways to reform or empower the WHO and the UN system to more effectively respond to public health emergencies — such as developing guidelines for roles of non–health-focused organizations, establishing mechanisms for mobilizing a global health workforce, developing strong regional networks that share information and coordinate responses, and creating national command centers — may also be considered.

The financing workstream will start with an examination of how global funding for response to pandemic threats can be set aside in advance or rapidly mobilized, where the money should come from, and how it should be spent. The workstream group will evaluate the role of the World Bank's proposed Pandemic Emergency Financing Facility, which will coordinate international financial response to pandemics — in particular, how the facility might ensure rapid deployment and prompt remuneration of health workers and minimize transaction times on other expenses. Vital to this discussion will be the roles to be played by the private sector,

especially the reinsurance industry, in pooling risk for global emergencies. The financing workshop will explore possible underwriting functions of banks, insurers, and investment houses and analyze how they could ease the financial shock of an epidemic and control the costs of response, including the cost of developing new drugs and vaccines. The financing of surveillance systems to comply with the IHR will also be considered.

In the workstream focused on resilient health systems, optimal approaches to achieving effective, resilient, and sustainable health systems in individual countries will be considered. Multiple components of health systems will be examined, including surveillance and health information systems; universal health coverage; workforce capacity; health systems infrastructure; community, regional, and global partner engagement; supply-chain coordination and management; and how these components are connected and coordinated to form a resilient health system. Other considerations include options for enhancing connections among the health sector, other sectors (such as agriculture, education, and commerce), and the community; strengthening syndromic surveillance systems to permit early reporting and response; enhancing education and training for health care workers, community leaders, and the public; and leveraging existing systems and resources to address surge needs and capabilities. These issues will be explored in the context of other efforts including the IHR, the Post-2015 Hyogo Framework for Disaster Risk Reduction, the Global Health Security Agenda, Health in All Policies initiatives, and the Sustainable Development Goals.

In the workstream for medical-product research and development, participating experts will examine issues surrounding ensuring global capacity for relevant research and development, acquisition, and dispensing of countermeasures and diagnostics. They may explore the need for a global plan to harmonize and strengthen regulatory systems, processes, and standards; models for public–private partnerships and nongovernmental organizations to support rapid research and development and complement and reinforce private-sector mechanisms; global financing models that provide incentives for research and development; frameworks for ethical and methodologic standards for product safety and efficacy; and investments in regulatory science and multiuse platforms to support rapid development and deployment.

In each workstream, expert participants will gather diverse perspectives on various policy options, which will be captured in written workshop summaries. The Commission will integrate the evidence from these workshops, synthesizing the expertise of more than 100 leaders in health and related areas. It will then develop a comprehensive set of recommendations based on the available evidence, with the ultimate aim of strengthening systems, reducing suffering, and saving lives. The Commission will also use information collected through expert consultations, literature reviews, and public input to propose a preparedness-and-response plan that will build on and be coordinated with other efforts in this area. This plan will be captured in a final report expected to be released by December 2015.

To be effective, the report will have to be positioned to encourage global health leaders to act on its recommendations. The International Oversight Group is working closely with decision makers to coordinate dissemination of the report. The plan is to feature the Commission's work at major events of the UN, the World Health Assembly, and the G7 and G20 groups of countries, aiming for effect well beyond the health sphere. Ultimately, world leaders' actions will determine international preparedness for future pandemics and medical disasters. This GHRF initiative should provide sound, evidence-based guidance for their decisions.

A world health crisis such as the Ebola outbreak should never happen again. If we prepare now, we can avoid devastation when the next outbreak occurs.

Perspective

Combating Emerging Threats — Accelerating the Availability of Medical Therapies

Luciana Borio, M.D., Edward Cox, M.D., M.P.H., and Nicole Lurie, M.D., M.S.P.H.

N Engl J Med 2015; 373:993-995 September 10, 2015 DOI: 10.1056/NEJMp1508708

Life-threatening emerging or reemerging infectious diseases increasingly inspire demands for access to novel, often untested therapies. Recent concern about transmission of the Middle East respiratory syndrome coronavirus (MERS-CoV) in Asia underscores the need to rapidly evaluate investigational therapies during outbreaks, identify those that actually benefit patients, and protect against those that cause harm. Although a traditional sequence of studies in animals followed by phased clinical trials works well for many therapeutics, that process may be too slow during public health emergencies. We propose establishing a new paradigm for accelerating evaluation of investigational therapies during public health emergencies so that therapies shown to be safe and effective can reach patients as soon as possible.

The primary approach to containing outbreaks of emerging infectious diseases involves standard public health measures, such as identifying and isolating infected persons, tracing their contacts to detect secondary infections, and protecting contacts and health care workers from exposure. General supportive medical care for anyone who becomes infected is essential, in addition to use of any proven specific treatments. When such treatments are lacking, clinicians commonly try therapies on the basis of experience with other diseases (usually on the basis of a postulated mechanism of action) in the hope of improving outcomes. For example, during the 2003 epidemic of the severe acute respiratory syndrome (SARS), several small observational studies examined the use of interferon, ribavirin, steroids, and convalescent plasma.[1] Unfortunately, the inability to implement properly designed trials precluded any clear demonstration of benefit, and some evaluations suggested possible harm.

During the 2009 H1N1 influenza pandemic, it was considered infeasible to establish a multisite clinical study for an investigational therapy during a public health emergency. Peramivir, an intravenously administered influenza antiviral drug under clinical development, was made available in the United States under Emergency Use Authorization (EUA) to treat certain hospitalized patients. Demand was brisk — nearly 1300 seriously ill patients received the drug.[2] Unfortunately, no reliable data on effectiveness were derived from this use. Some analyses suggested that mortality was increased among patients receiving peramivir, although that finding could have represented channeling bias (if patients receiving peramivir were already "sicker" in ways that could not be readily measured). A subsequent randomized clinical trial did not demonstrate either benefit or increased mortality associated with peramivir in patients hospitalized with influenza.[3] Demand for this investigational drug drove its use under EUA, but any imperative to get demonstrably effective products to people in need as quickly as possible was not fulfilled. This experience showed that a reasonable expectation of benefit doesn't always pan out, data derived from uncontrolled use may not be interpretable, and use outside a properly designed clinical trial can delay product assessment.

In early August 2014, two Americans who became infected with Ebola virus in West Africa were evacuated to the United States for medical care. They received various interventions, including ZMapp, an investigational monoclonal antibody cocktail in early development, not previously tested in humans. Their survival from what had been considered a highly fatal disease was followed by widespread demand for access to early-stage investigational therapies for Ebola. A World Health Organization ethics panel opined that although it was ethical to offer interventions with as-yet-unknown efficacy and adverse effects as potential treatment or prevention, there was a moral imperative to determine as quickly as possible which therapies worked.[4]
The international medical research community rushed to conduct clinical trials of several investigational products, but trial infrastructure took some time to establish. Meanwhile, initial doses of investigational drugs, some of which existed in very limited quantities, were administered to a few patients outside a clinical trial through so-called compassionate use. In some countries, such use continued even after clinical trials were established, despite the knowledge that it could delay the gathering of high-quality evidence to identify beneficial drugs or prolong the use of harmful ones.

Moreover, substantial disagreement emerged about the types of clinical trial designs that were appropriate for rapidly evaluating unproven therapies. Some investigators argued that randomized, controlled studies comparing an investigational therapy with available supportive medical care would be unethical,[5] even when a drug's limited supply meant that some patients would receive it while others couldn't; others argued that early randomized trials should take priority both ethically and scientifically. Several uncontrolled studies were implemented, but their design makes them unlikely to provide reliable efficacy data or adequately protect patients by detecting serious adverse effects.

In early 2015, the National Institutes of Health, in partnership with U.S. and West African academic institutions and health authorities in Liberia, Sierra Leone, and later, Guinea, implemented a common protocol in which multiple therapies, even those at very early stages of development, could be simultaneously evaluated against a shared control group in an adaptive randomized trial. In this design, the shared control group is initially given the best available supportive care until a drug is identified that improves outcomes. Once a drug is proven effective, it's incorporated into the supportive care that all trial patients receive, and the study may continue in order to evaluate the added benefit of other investigational drugs.

The first drug being evaluated under this protocol, ZMapp, advanced more rapidly than usual to a clinical trial designed to assess both safety and efficacy (typically, efficacy trials occur much later in development). The study is very efficient because it includes frequent prespecified interim evaluations of the accruing data, employing Bayesian analytic techniques, to identify a winner or a harmful drug as early as possible. If proven effective, ZMapp will be incorporated in the control group against which other therapies are tested. This protocol is being used in both high- and low-resource settings, providing equity of access to the study drug.

The critical need for rapid availability of effective new therapies coupled with advances in product development, manufacturing, and clinical trial design create new opportunities for efficient, scientifically sound evaluation of investigational therapies during public health emergencies. The serious impact of these emergencies and the lack of effective therapies warrant moving forward with clinical testing as soon as possible. The Ebola experience indicates that the usual phased development approach can be accelerated and abridged on the basis of

what's known about the candidate product, the severity and acuteness of the disease, and the limited window of opportunity for study. In such emergency settings, it may be appropriate to accept greater-than-usual degrees of uncertainty and risk in order to move rapidly to clinical trials, with the goal of getting safe, effective therapies to patients sooner.

The common protocol launched during the Ebola epidemic could serve as a model for rapidly evaluating promising but unproven therapies in the current MERS-CoV outbreak and future epidemics. Such an approach would allow earlier clinical testing of investigational drugs to accelerate identification of safe, effective therapies and thereby make them available to patients sooner. To succeed, this model requires close cooperation among clinical researchers, product developers, and public health and regulatory authorities globally.

Public health leaders need to take action before the next new threatening infectious disease emerges. One high-priority action will be the development and prepositioning of scientifically sound and widely accepted protocols by global public health authorities, to have them ready for use at the onset of a deadly outbreak wherever it strikes. In addition, work is needed to augment global clinical trial infrastructure, streamline processes for careful ethical review of multisite international studies, and establish model agreements for managing data and addressing intellectual property issues. If we are to act on lessons learned, there is no time to waste in getting this work done.

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Equity and Noncommunicable Disease Reduction under the Sustainable Development Goals
Harald Schmidt, Anne Barnhill
Essay | published 08 Sep 2015 | PLOS Medicine
10.1371/journal.pmed.1001872
Summary Points
:: Currently proposed Sustainable Development Goals (SDGs) include a timely call to significantly reduce the burden of noncommunicable diseases (NCDs).
:: Existing policy guidance highlights cost-effective interventions for NCDs, but focusing just on cost-effectiveness risks exacerbating socioeconomic and health inequalities rather than reducing them.
:: In implementing the SDGs, targets and interventions that benefit the worst off should be prioritized.
:: The United Nations should develop practical guidance to assist policy makers at the country level with incorporating equity considerations.

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Emilie Alirol, Pauline Lechevalier, Federica Zamatto, François Chappuis, Gabriel Alcoba, Julien Potet
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An Estimation of Private Household Costs to Receive Free Oral Cholera Vaccine in Odisha, India
Vittal Mogasale, Shantanu K. Kar, Jong-Hoon Kim, Vijayalaxmi V. Mogasale, Anna S. Kerketta, Bikash Patnaik, Shyam Bandhu Rath, Mahesh K. Puri, Young Ae You, Hemant K. Khuntia, Brian Maskery, Thomas F. Wierzba, Binod Sah
Research Article | published 09 Sep 2015 | PLOS Neglected Tropical Diseases
10.1371/journal.pntd.0004072
Abstract
Background

Service provider costs for vaccine delivery have been well documented; however, vaccine recipients' costs have drawn less attention. This research explores the private household out-of-pocket and opportunity costs incurred to receive free oral cholera vaccine during a mass vaccination campaign in rural Odisha, India.
Methods
Following a government-driven oral cholera mass vaccination campaign targeting population over one year of age, a questionnaire-based cross-sectional survey was conducted to estimate private household costs among vaccine recipients. The questionnaire captured travel costs as well as time and wage loss for self and accompanying persons. The productivity loss was estimated using three methods: self-reported, government defined minimum daily wages and gross domestic product per capita in Odisha.
Findings
On average, families were located 282.7 (SD = 254.5) meters from the nearest vaccination booths. Most family members either walked or bicycled to the vaccination sites and spent on average 26.5 minutes on travel and 15.7 minutes on waiting. Depending upon the methodology, the estimated productivity loss due to potential foregone income ranged from $0.15 to $0.29 per dose of cholera vaccine received. The private household cost of receiving oral cholera vaccine constituted 24.6% to 38.0% of overall vaccine delivery costs.
Interpretation
The private household costs resulting from productivity loss for receiving a free oral cholera vaccine is a substantial proportion of overall vaccine delivery cost and may influence vaccine uptake. Policy makers and program managers need to recognize the importance of private costs and consider how to balance programmatic delivery costs with private household costs to receive vaccines.
Author Summary
The price of vaccine and the costs of its delivery are two important economic measures considered by governments and various international organizations in their decisions on the use of a new vaccine. However, the costs to the vaccine recipients resulting from their travel, time and wage loss are hardly considered and rarely documented. Even if the vaccine is provided for free, the costs borne by vaccine recipients could be sufficient enough to be a hurdle for taking vaccine. We elucidate this less explored angle of "vaccine recipient cost" in the context of oral cholera vaccine mass campaign in Odisha, India. Our research shows that the potential loss of income for individuals for receiving oral cholera vaccine ranged from 25% to 38% of overall vaccine delivery costs. We believe our findings have global implications on future decisions and policy making on vaccine introduction in balancing programmatic delivery costs with private household costs to receive vaccines.

PLoS One
http://www.plosone.org/
[Accessed 12 September 2015]
Research Article

Impact of Pneumococcal Conjugate Vaccine Administration in Pediatric Older Age Groups in Low and Middle Income Countries: A Systematic Review

Kimberly Bonner, Emily Welch, Kate Elder, Jennifer Cohn
Published: September 2, 2015
DOI: 10.1371/journal.pone.0135270
Abstract

Introduction
Pneumococcal conjugate vaccine (PCV) is included in the World Health Organization's routine immunization schedule and is recommended by WHO for vaccination in high-risk children up to 60 months. However, many countries do not recommend vaccination in older age groups, nor have donors committed to supporting extended age group vaccination. To better inform decision-making, this systematic review examines the direct impact of extended age group vaccination in children over 12 months in low and middle income countries.
Methods
An a priori protocol was used. Using pre-specified terms, a search was conducted using PubMed, LILACS, Cochrane Infectious Diseases Group Specialized Register, Cochrane Central Register of Controlled Trials, CAB Abstracts, clinicaltrials.gov and the International Symposium on Pneumococci and Pneumococcal Diseases abstracts. The primary outcome was disease incidence, with antibody titers and nasopharyngeal carriage included as secondary outcomes.
Results
Eighteen studies reported on disease incidence, immune response, and nasopharyngeal carriage. PCV administered after 12 months of age led to significant declines in invasive pneumococcal disease. Immune response to vaccine type serotypes was significantly higher for those vaccinated at older ages than the unimmunized at the established 0.2ug/ml and 0.35ug/ml thresholds. Vaccination administered after one year of age significantly reduced VT carriage with odds ratios ranging from 0.213 to 0.69 over four years. A GRADE analysis indicated that the studies were of high quality.
Discussion
PCV administration in children over 12 months leads to significant protection. The direct impact of PCV administration, coupled with the large cohort of children missed in first year vaccination, indicates that countries should initiate or expand PCV immunization for extended age group vaccinations. Donors should support implementation of PCV as part of delayed or interrupted immunization for older children. For countries to effectively implement extended age vaccinations, access to affordably-priced PCV is critical.

Influence of Pneumococcal Conjugate Vaccine on Acute Otitis Media with Severe Middle Ear Inflammation: A Retrospective Multicenter Study
Hirotoshi Sugino, Shigeru Tsumura, Masaru Kunimoto, Masuhiro Noda, Daisuke Chikuie, Chieko Noda, Mariko Yamashita, Hiroshi Watanabe, Hidemasa Ishii, Toru Tashiro, Kazuhiro Iwata, Takashi Kono, Kaoru Tsumura, Takahiro Sumiya, Sachio Takeno, Katsuhiro Hirakawa
Research Article | published 08 Sep 2015 | PLOS ONE
10.1371/journal.pone.0137546

PLoS Pathogens
http://journals.plos.org/plospathogens/
(Accessed 12 September 2015)
[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 12 September 2015)

Impact of human mobility on the emergence of dengue epidemics in Pakistan

Amy Wesolowskia,b, Taimur Qureshic, Maciej F. Bonid,e, Pål Roe Sundsøyc, Michael A. Johanssonb,f, Syed Basit Rasheedg, Kenth Engø-Monsenc, and Caroline O. Buckeea,b,1
Author Affiliations

Edited by Burton H. Singer, University of Florida, Gainesville, FL, and approved August 6, 2015 (received for review April 2, 2015)

Significance

Dengue virus has rapidly spread into new human populations due to human travel and changing suitability for the mosquito vector, causing severe febrile illness and significant mortality. Accurate predictive models identifying changing vulnerability to dengue outbreaks are necessary for epidemic preparedness and containment of the virus. Here we show that an epidemiological model of dengue transmission in travelers, based on mobility data from ∼40 million mobile phone subscribers and climatic information, predicts the geographic spread and timing of epidemics throughout the country. We generate fine-scale dynamic risk maps with direct application to dengue containment and epidemic preparedness.

Abstract

The recent emergence of dengue viruses into new susceptible human populations throughout Asia and the Middle East, driven in part by human travel on both local and global scales, represents a significant global health risk, particularly in areas with changing climatic suitability for the mosquito vector. In Pakistan, dengue has been endemic for decades in the southern port city of Karachi, but large epidemics in the northeast have emerged only since 2011. Pakistan is therefore representative of many countries on the verge of countrywide endemic dengue transmission, where prevention, surveillance, and preparedness are key priorities in previously dengue-free regions. We analyze spatially explicit dengue case data from a large outbreak in Pakistan in 2013 and compare the dynamics of the epidemic to an epidemiological model of dengue virus transmission based on climate and mobility data from ∼40 million mobile phone subscribers. We find that mobile phone-based mobility estimates predict the geographic spread and timing of epidemics in both recently epidemic and emerging locations. We combine transmission suitability maps with estimates of seasonal dengue virus importation to generate fine-scale dynamic risk maps with direct application to dengue containment and epidemic preparedness.

Pneumonia

Vol 6 (2015)

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

[Reviewed earlier]

Prehospital & Disaster Medicine

Volume 30 - Issue 04 - August 2015

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

[Reviewed earlier]

Preventive Medicine

Volume 78, Pages 1-122 (September 2015)

http://www.sciencedirect.com/science/journal/00917435/78

HPV vaccine for teen boys: Dyadic analysis of parents' and sons' beliefs and willingness
Original Research Article
Pages 65-71
Jennifer L. Moss, Paul L. Reiter, Noel T. Brewer
Abstract
Objective
Parents and adolescents often decide together whether the child should receive human papillomavirus (HPV) vaccine. However, few studies have investigated the dyadic nature of beliefs that affect this process.
Method
Data came from the 2010 HPV Immunization in Sons (HIS) Study, a national sample of 412 parents and their adolescent sons. We conducted dyadic multivariate logistic regression to examine the relationships between parents' and sons' HPV vaccine beliefs and their willingness to have the son receive the vaccine.
Results
Less than half of parents and sons were willing to have the sons receive HPV vaccine (43% and 29%, respectively). Willing parents and sons anticipated greater regret if the son did not receive HPV vaccine but later contracted an HPV infection (parent odds ratio [OR] = 1.72, 95% confidence interval [CI] = 1.24–2.40; son OR = 1.51, 95% CI = 1.04–2.19) (both $p < .05$). Lower concerns about side effects, such as pain and fainting, were also associated with willingness.
Conclusion
Parents and sons were more willing to have the son receive HPV vaccine if they had higher anticipated regret about potential HPV infection and lower concerns about side effects. Communication campaigns may be able to target these beliefs to increase parents' and sons' willingness to seek HPV vaccination.

Proceedings of the Royal Society B
07 May 2015; volume 282, issue 1806
http://rspb.royalsocietypublishing.org/content/282/1806?current-issue=y[Reviewed earlier]
[Reviewed earlier]

Public Health Ethics
Volume 8 Issue 2 July 2015
http://phe.oxfordjournals.org/content/current
Special Symposium: Migrant Health
[Reviewed earlier]

Qualitative Health Research
October 2015; 25 (10)
http://qhr.sagepub.com/content/current
[New issue; No relevant content identified]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
June 2015 Vol. 37, No. 6
http://www.paho.org/journal/
[Reviewed earlier]

Risk Analysis
August 2015 Volume 35, Issue 8 Pages 1389–1592
http://onlinelibrary.wiley.com/doi/10.1111/risa.2015.35.issue-8/issuetoc
[Reviewed earlier]

Science
11 September 2015 vol 349, issue 6253, pages 1137-1256
http://www.sciencemag.org/current.dtl
[New issue; No relevant content identified]

Social Science & Medicine
Volume 140, Pages 1-146 (September 2015)
http://www.sciencedirect.com/science/journal/02779536/140
Paid maternity leave and childhood vaccination uptake: Longitudinal evidence from 20 low-and-middle-income countries
Original Research Article
Pages 104-117
Mohammad Hajizadeh, Jody Heymann, Erin Strumpf, Sam Harper, Arijit Nandi
Abstract
The availability of maternity leave might remove barriers to improved vaccination coverage by increasing the likelihood that parents are available to bring a child to the clinic for immunizations. Using information from 20 low-and-middle-income countries (LMICs) we estimated the effect of paid maternity leave policies on childhood vaccination uptake. We used birth history data collected via Demographic and Health Surveys (DHS) to assemble a multilevel panel of 258,769 live births in 20 countries from 2001 to 2008; these data were merged with longitudinal information on the number of full-time equivalent (FTE) weeks of paid maternity leave guaranteed by each country. We used Logistic regression models that included country and year fixed effects to estimate the impact of increases in FTE paid maternity leave policies in the prior year on the receipt of the following vaccines: Bacillus Calmette-Guérin (BCG) commonly given at birth, diphtheria, tetanus, and pertussis (DTP, 3 doses) commonly given in clinic visits and Polio (3 doses) given in clinic visits or as part of campaigns. We found that extending the duration of paid maternity leave had a positive effect on immunization rates for all three doses of the DTP vaccine; each additional FTE week of paid maternity leave increased DTP1, 2 and 3 coverage by 1.38 (95% CI = 1.18, 1.57), 1.62 (CI = 1.34, 1.91) and 2.17 (CI = 1.76, 2.58) percentage points, respectively. Estimates were robust to adjustment for birth characteristics, household-level covariates, attendance of skilled health personnel at birth and time-varying country-level covariates. We found no evidence for an effect of maternity leave on the probability of receiving vaccinations for BCG or Polio after adjustment for the above-mentioned covariates. Our findings were consistent with the hypothesis that more generous

paid leave policies have the potential to improve DTP immunization coverage. Further work is needed to understand the health effects of paid leave policies in LMICs.

Tropical Medicine and Health
Vol. 43(2015) No. 2
https://www.jstage.jst.go.jp/browse/tmh/43/0/_contents
[Reviewed earlier]

Tropical Medicine & International Health
October 2015 Volume 20, Issue 10 Pages 1257–1404
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2015.20.issue-7/issuetoc
[New issue; No relevant content identified]

Vaccine
Volume 33, Issue 38, Pages 4737-5026 (11 September 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/38
[Reviewed earlier]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 12 September 2015)
[No new relevant content identified]

Value in Health
July 2015 Volume 18, Issue 5, p549-738
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

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

Parasitology
FirstView Article
Special Issue Research Article
Pertussis immunity and epidemiology: mode and duration of vaccine-induced immunity

F. M. G. MAGPANTAYa1, M. DOMENECH DE CELLÈSa1, P. ROHANIa1a2a3 and A. A. KINGa1a2a3a4 c1
a1 Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI 48109, USA
a2 Center for the Study of Complex Systems, University of Michigan, Ann Arbor, MI 48109, USA
a3 Fogarty International Center, National Institutes of Health, Bethesda, MD 20892, USA
a4 Department of Mathematics, University of Michigan, Ann Arbor, MI 48109, USA
SUMMARY
The resurgence of pertussis in some countries that maintain high vaccination coverage has drawn attention to gaps in our understanding of the epidemiological effects of pertussis vaccines. In particular, major questions surround the nature, degree and durability of vaccine protection. To address these questions, we used mechanistic transmission models to examine regional time series incidence data from Italy in the period immediately following the introduction of acellular pertussis (aP) vaccine. Our results concur with recent animal-challenge experiments wherein infections in aP-vaccinated individuals proved as transmissible as those in naive individuals but much less symptomatic. On the other hand, the data provide evidence for vaccine-driven reduction in susceptibility, which we quantify via a synthetic measure of vaccine impact. As to the precise nature of vaccine failure, the data do not allow us to distinguish between leakiness and waning of vaccine immunity, or some combination of these. Across the range of well-supported models, the nature and duration of vaccine protection, the age profile of incidence and the range of projected epidemiological futures differ substantially, underscoring the importance of the remaining unknowns. We identify key data gaps: sources of data that can supply the information needed to eliminate these remaining uncertainties.

Thesis

Factors Associated with Willingness to the Human Papillomavirus (HPV) Vaccine Adoption among Unmarried Women in Taiwan

TI Liu –
2015-07-23
Abstract
Cervical cancer is both the ten most common cause of cancer and the three most common cause of death from cancer in women. Cervical cancer is mainly caused by the virus called Human Papillomavirus (HPV). The virus spread through sexual contact. Treatment of cervical cancer not only affects the health of the patience herself but also put great financial and mental burden on the members in the family. The medical expenditure on cervical cancer is quite high. The early stage cervical cancer it is a high cure rate cancer. The main policy of government to prevent the cervical cancer now is by promoting female citizens to do Papanicolaou test (Pap smear) regularly and to take the HPV vaccine. However, Pap smear now is facing a difficulty to raise the screen rate, and Pap smear result sometimes has false result or human error in it and cause the delay of best treatment time. Therefore, prevention of Human Papillomavirus (HPV) by vaccine is far more important.

Considering the importance of taking HPV vaccine to prevent the cervical cancer, this study does sampling from the latest research: Family and Fertility (2008, 10th), Population of Health and Research Center, Health Promotion Administration, Ministry of Health and Welfare. This study use STATA to do the regression analysis by Probit model and Marginal effect. Dependent variables are the willingness of unmarried women to take the HPV vaccine and the willingness of married women to encourage the age 9-26 unmarried female family member to take HPV

vaccine. Independent variables are social-economic status, health status, health behavior, health knowledge, and the frequency of using knowledge communication channels. The purpose of this study is to analysis the factors that influence the willingness of unmarried women to take HPV vaccine and also analysis the factors that influence the willingness of married women to encourage the age 9-26 unmarried female family member to take HPV vaccine.

The result of this study shows a high correlation: the willingness of unmarried women to take HPV vaccine is highly related to the education status of interviewee, the family's economic status of interviewee, BMI of interviewee, and if the interviewee ever heard of Human Papillomavirus (HPV) vaccine. Furthermore, the factors that influence the willingness of married women to encourage the age 9-26 unmarried female family member to take HPV vaccine are closely related to the family's economic status, the inhabited area of the married woman lived before 12 years old, the smoking habit of married woman, and if the married woman ever heard of Human Papillomavirus (HPV). The empirical result of this study could be a reference for the government when drafting the health care and medical service strategy, and also this result could be a basis for promoting HPV vaccine by the department concerned.

Expert Review of Vaccines

Efficacy and effectiveness of live attenuated influenza vaccine in school-age children

Kathleen Coelingh*a, Ifedapo Rosemary Olajideb, Peter MacDonalda & Ram Yogevc

DOI:10.1586/14760584.2015.1078732
Published online: 07 Sep 2015

Abstract

Evidence of high efficacy of live attenuated influenza vaccine (LAIV) from randomized controlled trials is strong for children 2–6 years of age, but fewer data exist for older school-age children. We reviewed the published data on efficacy and effectiveness of LAIV in children ≥5 years. QUOSA (Elsevier database) was searched for articles published from January 1990 to June 2014 that included 'FluMist', 'LAIV', 'CAIV', 'cold adapted influenza vaccine', 'live attenuated influenza vaccine', 'live attenuated cold adapted' or 'flu mist'. Studies evaluated included randomized controlled trials, effectiveness and indirect protection studies. This review demonstrates that LAIV has considerable efficacy and effectiveness in school-age children.

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Media/Policy Watch

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

We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where

content is published without restriction, but most publications require registration and some subscription level.

Al Jazeera
http://america.aljazeera.com/search.html?q=vaccine
Accessed 12 September 2015
[No new, unique, relevant content]

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 12 September 2015
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 12 September 2015
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 12 September 2015
The promise and pitfalls of partnerships in tackling extreme poverty around the world
Homi Kharas | September 10, 2015

Yesterday, Erik Solheim, chairman of the OECD's Development Assistance Committee, summarized the moral case for international development cooperation by paraphrasing Abraham Lincoln's remark that "If slavery is not wrong, then nothing is wrong." Solheim, in a modernized version, challenged the audience to ask "If the presence of extreme poverty in the world today is not wrong, then what is?" This provided the backdrop to a discussion of how to implement the sustainable development goals and, in particular, the first goal on ending extreme poverty.

The venue was Brookings, where I was moderating a discussion and Solheim was launching the OECD's 2015 Development Cooperation Report. In discussing the report's findings, Solheim highlighted the significant potential for partnerships as coalitions for action. He underlined the progress that partnerships have already made, citing 7 million lives saved as a result of just one vaccination and immunization partnership.

Partnerships are an intriguing new tool for driving progress in the developing world. They are a hybrid between unilateralism and multilateralism. In today's world, no actor, even one as large and powerful as the United States, can be successful if acting on its own…

Council on Foreign Relations
http://www.cfr.org/
Accessed 12 September 2015
[No new, unique, relevant content]

The Economist
http://www.economist.com/
Accessed 12 September 2015
[No new, unique, relevant content]

Financial Times
http://www.ft.com/hme/uk
Accessed 12 September 2015
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 12 September 2015
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 12 September 2015
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 12 September 2015
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 12 September 2015
[No new, unique, relevant content]

The Huffington Post
http://www.huffingtonpost.com/
Accessed 12 September 2015

Mail & Guardian
http://mg.co.za/
Accessed 12 September 2015
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 12 September 2015
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 12 September 2015
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 12 September 2015

[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 12 September 2015

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

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