Center for Vaccine Ethics and Policy
NYU | Wistar Institute | CHOP

Vaccines and Global Health: The Week in Review
7 June 2014
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: 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 3,500 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

The Brussels G7 Summit Declaration

European Commission - MEMO/14/402 05/06/2014
Excerpt

…21. We remain committed to the Muskoka Initiative on maternal, newborn and child health, and welcome the call made at the Saving Every Woman, Every Child Summit in Toronto to accelerate progress on this global priority. In addition we are committed to ensuring sexual and reproductive health and reproductive rights, and ending child, early and forced marriage and female genital mutilation and other harmful practices. The health and well-being of women and children are improved through ensuring universal access to affordable, quality, essential health services, strengthening health, education and child protection systems and improving nutrition and access to immunisation. **We recognise the impact of the GAVI Alliance (Global Alliance for Vaccines and Immunisation) and welcome its efforts to expand access to vaccines to an additional 300 million children during 2016-2020. We welcome Germany's offer to host the second replenishment in early 2015, reaffirm our commitment, and call on other public and private donors to contribute to the replenishment of the GAVI Alliance**. We reaffirm our commitment to an AIDS free generation and to the Global Fund to fight AIDS, Tuberculosis and Malaria to reduce the burden of these three major infectious diseases on eligible countries and regions.

22. To address the threat posed by infectious diseases, we support the Global Health Security Agenda and commit to working with partner countries to strengthen compliance with the World

Health Organisation's (WHO) International Health Regulations and enhance health security around the world. **We commit to working across sectors to prevent, detect and respond to infectious diseases, whether naturally occurring, accidental, or the result of a deliberate act by a state or non-state actor. That includes building global capacity so that we are better prepared for threats such as the recent Ebola outbreak in West Africa and working together, in close cooperation with WHO, to develop a Global Action Plan on antimicrobial resistance**….

G7 Summit in Brussels, 4 – 5 June 2014: Background note and facts about the EU's role and actions
European Commission - MEMO/14/392 03/06/2014
Excerpt
4. Development
…On 20 May, the EU announced that it will provide €25 million per year in the period 2014-2020 to fund vaccines and immunisation programmes worldwide through the GAVI alliance – more than double than previously committed. Since 2003, the European Commission has committed over €83 million to the GAVI Alliance, coming in part from the Development Co-operation Instrument (DCI) and in part from the European Development Fund (EDF). Thanks to donors like the EU, close to half a billion children have been immunised since 2000, resulting in 6 million lives saved….

WHO: Global Alert and Response (GAR) – *Disease Outbreak News* [to 7 June 2014]
http://www.who.int/csr/don/en/
:: Ebola virus disease, West Africa – update 4 June 2014
:: Middle East respiratory syndrome coronavirus (MERS-CoV) – update 4 June 2014

WHO concludes a MERS-CoV risk assessment mission in the United Arab Emirates
6 June 2014
Excerpt
A team from the WHO and technical partners from the Global Outbreak Alert and Response Network (GOARN) has concluded a 5 day mission in United Arab Emirates (UAE).
The team assessed the risk posed by the Middle East respiratory syndrome coronavirus, or MERS-CoV in the country. The team consisted of 6 experts in coordination, epidemiology, infection prevention and control, food safety and the human-animal interface, and risk communication.
Health authorities in the UAE had invited WHO to review the current situation after an upsurge in MERS-CoV infections in April. Upon arrival, the WHO team met with H.E Mr Abdul Rahman bin Mohammed Al Owais, the Minister of Health, in Dubai to discuss the mission.
Investigation and evaluation
During the mission, the team had extensive meetings with experts from Health Authority Abu Dhabi, Dubai Health Authority and the Abu Dhabi Food Control Authority. The team visited the hospital to which two-thirds of the country's cases can be traced, in order to review the epidemiological investigation and assess the infection prevention and control measures that have been applied. The WHO team evaluated the work done on investigating possible exposure routes, transmission patterns, and the clinical situation.
"We are impressed by the amount of data and information generated during the investigation of MERS cases by UAE to help better understand MERS- CoV. This knowledge is of utmost

importance to the rest of the world to better discover the source of the virus and the routes of transmissions from animals to humans, "said Peter Ben Embarek, WHO team leader.

"The UAE health authorities have been following up diligently on the MERS-CoV cases, including repeated laboratory testing to check when cases have been cleared of the virus. This data will make an important contribution to the risk assessment and to guide the health response internationally," Ben Embarek concluded.

Need to share experience and knowledge

The preliminary result of the mission indicates that the cases in UAE do not show evidence of sustained human to human infection. The recent upsurge of cases in Abu Dhabi appears to have been caused by a combination of factors, including a breach in infection prevention and control measures in health care settings, active surveillance and increase in community acquired cases…

http://www.who.int/features/2014/mers-cov-risk-assessment/en/

WHO: World travel advice on MERS-CoV for pilgrimages [Umra and Hajj]

3 June 2014

Excerpt

I. Introduction

…The virus appears to be circulating widely throughout the Arabian Peninsula and most MERS cases have been reported by the Kingdom of Saudi Arabia. While most cases have occurred among residents, some cases have occurred among visitors. Based on currently available information, the overall risk for visitors to acquire MERS infection appears to be low.

The currently known epidemiological patterns indicate some infections occur in communities. Cases detected in the community may arise from contact with infected animals or unprocessed products from infected animals, from person-to-person spread in the community, or from acquisition in the healthcare setting by individuals who remained living in the community. Studies are underway to determine the relative contribution of all of these, but the studies are not yet complete. Other infections have occurred in hospitals, primarily when hospitalization of an infected patient, coupled with suboptimal infection control and prevention practices, has led to hospital transmission and outbreaks. Finally, infection among families has been seen and may reflect either person to person transmission or possibly exposure to a common source. At this time, the understanding of how MERS is transmitted is not complete, and we await the results of the studies in progress. There is no information at this time to suggest that widespread transmission is occurring in communities.

Since April 2014, there was an increased number of cases, notably in the Kingdom of Saudi Arabia and in the United Arab Emirates in both communities and health care setting. The latest information on MERS-CoV can be found here:
http://www.who.int/csr/disease/coronavirus_infections/en/

II. Effective communication of risk information

It is important for countries to use all practical and effective means possible to communicate information on a range of issues before, during and after Umra and Hajj to all key groups, including the following:

:: travellers to Umra and Hajj, particularly vulnerable groups within this population;
:: public health officials;
:: health care staff responsible for the care of ill pilgrims;
:: transportation and tourism industries; and
:: the general public.

[Text continues with specific recommendation for country actions before, during and after Umra and Hajj]

III. Measures at borders and for conveyances

WHO does not recommend the application of any travel or trade restrictions or entry screening.

WHO encourages countries to provide information on MERS and this travel advice to transport operators and ground staff, and about self-reporting of illness by travellers.

As provided by the IHR, countries should ensure that:

:: routine measures are in place at point of entry for assessing ill travellers detected on board conveyances (such as planes and ships) and at entry;

:: procedures and means are in place for communicating information on ill travellers between conveyance and points of entry as well as between points of entry and national health authorities;

:: safe transportation of symptomatic travellers to hospitals or designated facilities for clinical assessment and treatment is organized….

Polio [to 7 June 2014]

Independent Monitoring Board of the Global Polio Eradication Initiative: Ninth Report – May 2014 52 pages

Excerpts from Executive Summary; Editor's bolded text

EXECUTIVE SUMMARY

Eighteen months ago, as 2012 drew to a close, optimism was running high for the Global Polio Eradication Initiative. Polio transmission in India had been interrupted. The three remaining endemic countries (Pakistan, Nigeria, Afghanistan) had made significant programmatic improvements. Some believed that success was imminent; that polio would soon be history.

Within a matter of months, this optimism quickly unwound:

::Targeted killing of polio vaccinators in Pakistan shocked the world and created major operational constraints.

::Polio virus entered Waziristan, a part of Pakistan in which polio vaccination had been – and remains – banned by Taliban commanders.

:: The national structure for managing polio eradication in Pakistan was dismantled at a time when it needed to be strengthened.

:: Nigeria's security situation deteriorated. Here too, vaccinators tragically lost their lives and the program's operations were severely impaired.

:: Nigeria polio virus was exported to southern Somalia, where it infected a population unprotected against polio because of an al-Shabab ban on vaccination that remains in place.

:: Pakistan polio virus spread to Syria, causing a major outbreak amidst the country's civil war.

:: Pakistan polio virus spread also to Israel, West Bank and Gaza, and Iraq, and Nigeria polio virus to Cameroon and Equatorial Guinea – each outbreak over-stretching the global program's resources and credibility.

In 2012, there were 223 polio cases in five countries. In 2013, there were 407 cases in eight countries…

…In 1988 (26 years ago now) every country in the world resolved to eradicate polio. Most managed to do so by the year 2000. For the last 14 years, we have been witnessing the excruciatingly long tail of completing global eradication. The "last 1%", a phrase that only three years ago was an inspiring rallying call to finish the job, is becoming an open goal for eye-

rolling cynics. Every additional polio year costs lives and money, saps morale, puts future donations at risk and holds the public health world back from making further health gains. The goal of stopping global polio transmission has been serially missed. The deadline year of 2000 came and went; so did 2004; and so too did 2012.

As the end-2014 deadline fast approaches, Nigeria and Pakistan are both at risk of failing to stop transmission in time (with Pakistan's risk extreme). There is a significant risk of one or more of the current outbreaks becoming prolonged. There is serious risk of failure to anticipate and prevent an outbreak elsewhere. Given these factors, the IMB's considered analysis is that the latest strategic plan goal of interrupting transmission by the end of 2014 stands at extreme risk.

The World Health Assembly has rightly declared polio eradication a programmatic emergency for global public health. WHO has rightly called the spread of polio a public health emergency of international concern. There is every reason why polio must be eradicated – and fast. Failure to do so is inexcusable. This last 1% cannot be allowed to drag on any longer. **The program is failing children and families in the poorest parts of the world. These broken promises mean that every child paralysed in 2015 will be a child grossly let down, their paralysis an avoidable catastrophe.**

All eyes must now be focused on minimising the number of such avoidable catastrophes – on ensuring that Nigeria succeeds in 2014; on Pakistan rebuilding a program that can succeed soon after; and on preventing and responding to outbreaks with consistency and vigour.

The IMB makes 11 recommendations:

1. We recommend the establishment of an Emergency Operations Center (EOC) in Pakistan, which builds upon Pakistan's recent experiences in responding to natural disasters and other countries' experiences in emergency polio response. Top-level civil servants, senior representatives of national, regional and local government, religious leaders as well as military leaders should be a key part of this process. We urge that this new body be fully operational by 1 July 2014.
2. We recommend that the heads of the Global Polio Eradication Initiative core partner agencies meet urgently with the President and Prime Minister of Pakistan to support their essential leadership of the Pakistan polio eradication program, and to offer every possible assistance in establishing the new EOC as a strong national body with the power, resources and capacity to drive transformative action.
3. We recommend that the President of Nigeria galvanizes action to gain the pledge of all national, state and local candidates in the forthcoming election, together with traditional and religious leaders, to protect the polio eradication program from disruption and politicization, returning it to its humanitarian role in saving the lives of Nigerian children.
4. We recommend that the Polio Oversight Board ensures that the promised Central Africa outbreak coordinator is installed by 1 July 2014, resourced appropriately, and that the Board formally investigates why the program's response in Central Africa has been much weaker than in the Horn of Africa or in the Middle East.
5. We recommend that a new, dedicated team be established at global level to focus on outbreak response, its first job being to substantially strengthen the outbreak response Standard Operating Procedures to ensure that future responses will be consistently excellent.
6. We recommend that a dedicated team be established at global level to rapidly improve the program's approach to outbreak prevention in the Red List countries and beyond. Scenarios and exercises should form a key part of its activities.

7. We recommend that the core partners meet in person to agree upon a way to address the three improvement aims for securing communities' greater trust, based on the analysis of social mobilisation in our report.

8. We recommend that WHO relax its grip on the training of vaccinators and their supervisors, allowing UNICEF, CDC and other partners to contribute, particularly to enhance the interpersonal communication skills of vaccinators

9. We recommend that Pakistan and Nigeria take urgent steps to license additional oral polio vaccines so that they can be used within the next six months, in order to create greater flexibility in global vaccine supply.

10. We recommend that current concerns and unease about the transparency and communication of the polio eradication budget are properly and openly addressed. This might best be achieved by a frank discussion at the Polio Oversight Board.

11. We recommend, in relation to the management review that is underway, that the Polio Oversight Board appoints an advisory panel of four seasoned executives and management experts, who have experience of running or advising some of the most complex enterprises in the world, to help shape the management consultants' analysis and recommendations before they are finalized for the Polio Oversight Board.

GPEI Update: Polio this week - *As of 4 June 2014*

Global Polio Eradication Initiative

Editor's Excerpt - Full report:

http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx

:: The Independent Monitoring Board (IMB) has released its ninth quarterly report assessing progress toward polio eradication, including recommendations to overcome challenges. The board noted the progress in Nigeria and Afghanistan, and expressed alarm about the situation in Pakistan, highlighting the high likelihood that transmission of virus will continue into 2015. While the IMB commended the outbreak responses in the Middle East and the Horn of Africa, it also expressed concern about the activities in Central Africa, and recommended stronger global capacity and processes for outbreak response. The full report is available here [see excerpt above]

:: The GPEI mourns the passing of Dr. Ciro de Quadros, a member of the IMB and a true hero in the effort to protect all children from vaccine-preventable diseases.

:: Speaking at Rotary International's Annual Convention in Sydney on 1 June, Australian Prime Minister Tony Abbott announced his government's AUD$100 million commitment for polio eradication. Read more here.

Pakistan

:: Four new WPV1 cases were reported in the past week including two cases from North Waziristan, Federally Administered Tribal Areas – FATA, one case from Bannu, Khyber Pakhtunkhwa – KP, and one case from the previously uninfected district of Karachi (District of Sindh Industrial and Trading Estate), Sindh. The most recent WPV1 case had onset of paralysis on 15 May from North Waziristan. The total number of WPV1 cases reported from Pakistan for 2014 is 71.

Horn of Africa

:: A case of polio due to wild poliovirus type 1 (WPV1) was reported last week from Jariban district in Mudug province, Somalia, with onset of paralysis on 11 May. This is the second case of polio in the Horn of Africa this year. The other case was reported from Ethiopia with onset of paralysis on 5 January.

GAVI Watch [to 7 June 2014]
http://www.gavialliance.org/library/news/press-releases/
:: GAVI Alliance thanks Norway for its support to the polio endgame strategy
Geneva, 5 June 2014
Excerpt
…In an agreement signed this week in Oslo, Norway has committed to contribute US$190 million (NOK 1.14 billion) to the GAVI Alliance's polio work for the period 2014-2019. This will support the Alliance's effort to complement GPEI's work, strengthening routine immunisation and introducing inactivated polio vaccine (IPV) in GAVI-supported countries.
"Norway's leadership in global health is legendary, this additional support for inactivated polio immunisation and strengthening routine immunisation inspires the world to work together for a world without polio," said Dr Seth Berkley, CEO of the GAVI Alliance.
"I am delighted that we have signed an agreement with GAVI to support global efforts to eradicate polio," said Børge Brende, Norwegian Minister for Foreign Affairs. "We have a unique opportunity to eradicate this infectious and debilitating disease, but it will require an extra effort if we are to succeed."…
:: Children's Investment Fund Foundation to invest in GAVI Alliance HPV programmes
London, 4 June 2014
Excerpt
The Children's Investment Fund Foundation (CIFF) will invest US$25 million in the GAVI Alliance "to protect girls and women in developing countries from the leading cause of cervical cancer." The funding will be matched by the UK's Department for International Development through the GAVI Matching Fund.
CIFF chief executive Michael Anderson announced the new funding at the UK launch of the End Cervical Cancer Now campaign, held at the Houses of Parliament today. The event was attended by H.E. Lordina Dramani Mahama, the First Lady of Ghana, and H.E. Dr Maria da Luz Dai Guebuza, the first Lady of Mozambique as well as GAVI Alliance CEO Dr Seth Berkley and Baroness Northover…
… "Our investment in the GAVI Alliance will have a major impact on the lives of women and families in developing countries," said Michael Anderson. "HPV vaccine brings a double benefit for adolescent girls. Not only does it protect them from a terrible disease but it gives them the opportunity to access health services and engage with healthcare professionals, in many cases for the first time in a number of years."
"Cervical cancer is a devastating disease that kills women at exactly the time when their families need them most," said GAVI CEO Dr Seth Berkley. "I am pleased that CIFF is showing incredible support for our goal of reaching 30 million girls in 40 countries with this vital vaccine by 2020."…

The **Weekly Epidemiological Record (WER) for 6 June 2014**, vol. 89, 23 (pp. 245–256) includes:
:: Review of the 2013–2014 winter influenza season, northern hemisphere
http://www.who.int/entity/wer/2014/wer8923.pdf?ua=1

WHO & Regionals

PAHO
:: PAHO/WHO reminds travelers to get vaccinated against measles and rubella before going to the 2014 FIFA World Cup (06/06/2014)
:: OAS and PAHO will work together to achieve universal health coverage in the Americas (06/04/2014)
:: PAHO/WHO calls for stepped-up efforts to detect and treat people with TB/HIV coinfections (06/04/2014)

UNICEF Watch [to 7 June 2014]
http://www.unicef.org/media/media_71724.html
:: UNICEF Executive Board puts spotlight on Africa's children
:: Liberia's immunization programme gets a 15-generator boost from UNICEF and GAVI
MONROVIA, Liberia, 6 June 2014 – UNICEF has officially handed over 15 generators to the Government of Liberia to help ensure all children are immunized with vaccines that have been properly and safely stored.

CDC/MMWR Watch [to 7 June 2014]
http://www.cdc.gov/mmwr/mmwr_wk.html
MMWR June 6, 2014 / Vol. 63 / No. 22
:: Influenza Activity — United States, 2013–14 Season and Composition of the 2014–15 Influenza Vaccines
:: Measles — United States, January 1–May 23, 2014

Bill & Melinda Gates Foundation announces funding for 55 projects from 12 countries through its Grand Challenges Explorations (GCE) initiative
June 3, 2014, SEATTLE
Excerpt
…Three projects were awarded additional funding following progress made during the first phase of the GCE grant, totaling $2.3 million. These projects include two to improve the vaccine cold chain:
:: During Phase I of their project, Nancy Muller at PATH in the United States developed a straightforward method to eliminate vaccine freezing by adding specialized material that acts as a thermal buffer between ice packs and vaccines. In Phase II, PATH will assist at least one manufacturing partner in bringing a new World Health Organization Performance, Quality, and Safety-qualified freeze-safe vaccine carrier to market.
:: In Phase I, Nithya Ramanathan at Nexleaf Analytics in the United States developed its ColdTrace remote temperature monitoring sensor, which was deployed in 17 clinics in Kenya and Haiti and proved able to provide real-time alerts that help prevent vaccine spoilage. In Phase II, Nexleaf will install ColdTrace in 500 clinics across Kenya, India, and Mozambique to show the impact of remote temperature monitoring and further develop its low-cost platform to improve cold chain infrastructure…

.
FDA News Release: FDA launches openFDA to provide easy access to valuable FDA public data

June 2, 2014
Excerpt

…the U.S. Food and Drug Administration launched openFDA, a new initiative designed to make it easier for web developers, researchers, and the public to access large, important public health datasets collected by the agency. …openFDA will make the FDA's publicly available data accessible in a structured, computer readable format that will make it possible for technology specialists, such as mobile application creators, web developers, data visualization artists and researchers to quickly search, query, or pull massive amounts of public information instantaneously and directly from FDA datasets on an as needed basis…

WHO: Humanitarian Health Action [to 7 June 2014]
http://www.who.int/hac/en/
No new relevant content identified.

Global Fund Watch [to 7 June 2014]
http://www.theglobalfund.org/en/mediacenter/announcements/
No new relevant content identified.

European Medicines Agency Watch [to 7 June 2014]
http://www.ema.europa.eu/ema/
No new relevant content identified.

UN Watch [to 7 June 2014]
Selected meetings, press releases, and press conferences relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.un.org/en/unpress/
No new relevant content identified.

Industry Watch [to 7 June 2014]
Selected media releases and other selected content from industry.

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

UNICEF: 2013 Supply Annual Report

June 2014 88 pages
In 2013, UNICEF procured over $2.8 billion in supplies and services. UNICEF's work in monitoring the procurement of supplies, their quality, and timeliness in their delivery is critical to ensuring the right supplies are available when children need them, wherever they are.
Introduction
Excerpt

At the heart of UNICEF's supply and logistics strategies is the goal of reaching the most

disadvantaged and excluded children. In 2013, an opportunity for reflection, planning and consolidation has allowed the supply function to position itself to support the achievement of equity as highlighted in UNICEF's Strategic Plan for 2014 – 2017.

A major expression of this commitment was reflected in the innovation, procurement and delivery strategies that underpinned UNICEF's $2.8 billion expenditure on supplies supporting the health, education and protection of children in over 130 countries.

The needs of children were the focus of UNICEF's immediate and large-scale supply response in emergencies. The devastation caused by Typhoon Haiyan in the Philippines, the intensified conflicts in the Central African Republic and South Sudan, and the prolonged suffering of Syrian children across several countries in the region, made plain the tragic consequences of humanitarian crises. Where children and families were caught in armed conflict, the re-emergence of polio, increasing child malnutrition and an absence of functioning schools highlighted a generation's urgent need for emergency supplies to support programme interventions.

Work continued in supply chain strengthening and long-term capacity development with governments to help ensure that, day in and day out, children have access to essential supplies. UNICEF welcomed delegations from the Democratic Republic of the Congo, Kenya, and Nigeria to identify supply chain bottlenecks and develop solutions to improve the performance of immunization and health supply systems. The missions resulted in action plans targeting key segments of supply chains with performance improvements.

As a catalyst of achieving greater impact for children, monitoring supply chains is an evolving endeavour. UNICEF's focus on lowering cost and improving performance capitalises on advances in technology, wider network coverage and greater use of mobile devices. UNICEF's deepening expertise with its recently implemented Enterprise Resource Planning (ERP) system is improving the scope, timeliness and quality of data that supports analyses of processes and outcomes, and builds the evidence base for taking corrective and preventive action. These developments are enabling UNICEF and partners to create supply chain information networks that are more visible and efficient, and more inclusive of feedback from people who use UNICEF supplies…

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 14, Issue 6, 2014
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

American Journal of Infection Control
Vol 42 | No. 6 | June 2014 | Pages 585-696
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
Volume 46, Issue 6, p543-660, e53-e60 June 2014
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 104, Issue S3 (June 2014)
http://ajph.aphapublications.org/toc/ajph/current
Issue Focus: Health of American Indians and Alaska Natives
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
June 2014; 90 (6)
http://www.ajtmh.org/content/current
[No relevant content]

Annals of Internal Medicine
3 June 2014, Vol. 160. No. 11
http://annals.org/issue.aspx
[No relevant content]

BMC Health Services Research
(Accessed 7 June 2014)
http://www.biomedcentral.com/bmchealthservres/content
[No new relevant content]

BMC Public Health
(Accessed 7 June 2014)
http://www.biomedcentral.com/bmcpublichealth/content
Research article
Qualitative study of the feasibility of HPV vaccine delivery to young adolescent girls in Vietnam: evidence from a government-implemented demonstration program
D Scott LaMontagne, Nguyen Quy Nghi, Le Thi Nga, Amynah Janmohamed, Dang Thi Huyen, Nguyen Tran Hien, Vivien Davis Tsu
BMC Public Health 2014, 14:
Abstract (provisional)

Background
Introduction of human papillomavirus (HPV) vaccine in national programs has proceeded apace since 2006, mostly in high-income countries. Recently concluded pilots of HPV vaccination in low-income countries have provided important lessons learned for these settings; however, rigorous evaluations of the feasibility of these delivery strategies that effectively reach young adolescents have been few. This paper presents results from a qualitative evaluation of a demonstration program which implemented school-based and health center-based HPV vaccinations to all girls in grade 6, or 11 years of age, for two years in four districts of Vietnam.
Methods
Using semi-structured interviews of 131 health and education staff from local, district, province, and national levels and 26 focus-group discussions with local project implementers (n = 153), we conducted a qualitative two-year evaluation to measure the impact of HPV vaccinations on the health and education systems.
Results
HPV vaccine delivery at schools or health centers was made feasible by: a. close collaboration between the health and education sectors, b. detailed planning for implementation, c. clearly defined roles and responsibilities for project implementers, d. effective management and supervision of vaccinations during delivery, and e. engagement with community organizations for support. Both the health and education systems were temporarily challenged with the extra workload, but the disruptions were short-lived (a few days for each of three doses) and perceived as worth the longer-term benefit of cervical cancer prevention.
Conclusion
The learning from Vietnam has identified critical elements for successful vaccine delivery that can provide a model for other countries to consider during their planning of national rollout of HPV vaccine.

British Medical Bulletin
Volume 110 Issue 1 June 2014
http://bmb.oxfordjournals.org/content/current
[No relevant content]

British Medical Journal
07 June 2014 (Vol 348, Issue 7961)
http://www.bmj.com/%5Bfield_highwire_a_cpath-raw%5D-0
Editorial
H1N1 influenza vaccination during pregnancy
Deshayne B Fell, perinatal epidemiologist1, Linda Dodds, professor of obstetrics and gynecology and paediatrics2, Shelly McNeil, associate professor of medicine3, Noni E MacDonald, professor of pediatrics and microbiology and immunology3
Excerpt
H1N1 safety data look reassuring, but we need ongoing surveillance of all influenza vaccines given to pregnant women
to pregnant women from influenza infection have long been recognized.1 The recent 2009-10 H1N1 pandemic was no exception—pregnant women were at higher risk of severe H1N1 influenza illness compared with the general population,2 and those with H1N1 influenza had higher rates of adverse pregnancy outcomes than did uninfected pregnant women.3 Despite

limited safety data for use of the monovalent H1N1 vaccines in pregnancy, pregnant women were widely prioritized for H1N1 vaccination programs.4 Fortunately, enhanced surveillance of pregnant women during the pandemic has enabled retrospective evaluation of the safety of monovalent H1N1 vaccine in obstetric populations around the world…

Research

Evaluation of safety of A/H1N1 pandemic vaccination during pregnancy: cohort study

BMJ 2014; 348 doi: http://dx.doi.org/10.1136/bmj.g3361 (Published 29 May 2014)
Cite this as: BMJ 2014;348:g3361

Abstract

Objective To assess the risk of maternal, fetal, and neonatal outcomes associated with the administration of an MF59 adjuvanted A/H1N1 vaccine during pregnancy.

Design Historical cohort study.

Setting Singleton pregnancies of the resident population of the Lombardy region of Italy.

Participants All deliveries between 1 October 2009 and 30 September 2010. Data on exposure to A/H1N1 pandemic vaccine, pregnancy, and birth outcomes were retrieved from regional databases. Vaccinated and non-vaccinated women were compared in a propensity score matched analysis to estimate risks of adverse outcomes.

Main outcome measures Main maternal outcomes included type of delivery, admission to intensive care unit, eclampsia, and gestational diabetes; fetal and neonatal outcomes included perinatal deaths, small for gestational age births, and congenital malformations.

Results Among the 86,171 eligible pregnancies, 6246 women were vaccinated (3615 (57.9%) in the third trimester and 2557 (40.9%) in the second trimester). No difference was observed in terms of spontaneous deliveries (adjusted odds ratio 1.02, 95% confidence interval 0.96 to 1.08) or admissions to intensive care units (0.95, 0.47 to 1.88), whereas a limited increase in the prevalence of gestational diabetes (1.26, 1.04 to 1.53) and eclampsia (1.19, 1.04 to 1.39) was seen in vaccinated women. Rates of fetal and neonatal outcomes were similar in vaccinated and non-vaccinated women. A slight increase in congenital malformations, although not statistically significant, was present in the exposed cohort (1.14, 0.99 to 1.31).

Conclusions Our findings add relevant information about the safety of the MF59 adjuvanted A/H1N1 vaccine in pregnancy. Residual confounding may partly explain the increased risk of some maternal outcomes. Meta-analysis of published studies should be conducted to further clarify the risk of infrequent outcomes, such as specific congenital malformations.

Bulletin of the World Health Organization
Volume 92, Number 6, June 2014, 385-464
http://www.who.int/bulletin/volumes/92/6/en/

Special theme: BRICS and global health

Impact of BRICS' investment in vaccine development on the global vaccine market

Miloud Kaddar, Julie Milstien & Sarah Schmitt

Abstract

Brazil, the Russian Federation, India, China and South Africa – the countries known as BRICS – have made considerable progress in vaccine production, regulation and development over the past 20 years. In 1993, all five countries were producing vaccines but the processes used were outdated and non-standardized, there was little relevant research and there was negligible international recognition of the products. By 2014, all five countries had strong initiatives for the development of vaccine technology and had greatly improved their national regulatory capacity.

South Africa was then the only BRICS country that was not completely producing vaccines. South Africa is now in the process of re-establishing its own vaccine production and passing beyond the stage of simply importing, formulating and filling vaccine bulks. Changes in the public sector's price per dose of selected vaccines, the global market share represented by products from specific manufacturers, and the attractiveness, for multinational companies, of partnership and investment opportunities in BRICS companies have all been analysed. The results indicate that the BRICS countries have had a major impact on vaccine price and availability, with much of that impact attributable to the output of Indian vaccine manufacturers. China is expected to have a greater impact soon, given the anticipated development of Chinese vaccine manufacturers in the near future. BRICS' accomplishments in the field of vaccine development are expected to reshape the global vaccine market and accelerate access to vaccines in the developing world. The challenge is to turn these expectations into strategic actions and practical outcomes.

The economic and social benefits of childhood vaccinations in BRICS

Andrew J Mirelman a, Sachiko Ozawa a & Simrun Grewal a
a. Department of International Health, Johns Hopkins Bloomberg School of Public Health, 615 N Wolfe St, E8132, Baltimore, Maryland, 21205, United States of America.
Bulletin of the World Health Organization 2014;92:454-456. doi:
http://dx.doi.org/10.2471/BLT.13.132597

Initial text

The international community has successfully promoted childhood vaccination as an essential public health intervention. This has been accomplished through efforts such as the World Health Organization's (WHO) Expanded Programme on Immunization and more recently, the establishment of the Global Alliance for Vaccines and Immunization (GAVI Alliance), a global health partnership committed to ensuring access to low-cost immunization in developing countries. While such global efforts have resulted in large increases in vaccine coverage worldwide, there is still a large population that remains uncovered. Inadequate immunization coverage is apparent among middle-income countries. As middle-income countries do not receive support from the GAVI Alliance, lack of funds may account for low coverage, and vaccine delivery in these settings may suffer from inefficiencies that have been resolved in high-income countries.1

The potential benefits of expanded vaccine coverage are evident among the following five emerging economies: Brazil, the Russian Federation, India, China and South Africa – often referred to as BRICS. These countries have seen high economic growth in recent years – expanding their capacity to produce, procure and provide health care. The countries represent a range of lower-middle-income (India), upper-middle-income (Brazil, China and South Africa) and high-income (Russian Federation) countries. They include the two most populous countries in the world – China and India. Collectively, BRICS have a population of nearly 239 million children under the age of five years…

Clinical Infectious Diseases (CID)

Volume 58 Issue 12 June 15, 2014
http://cid.oxfordjournals.org/content/current

The State of Norovirus Vaccines

Stanley A. Plotkin, Section Editor, Kari Debbink1, Lisa C. Lindesmith2, and Ralph S. Baric1,2
Author Affiliations
1Department of Microbiology and Immunology

2Department of Epidemiology, University of North Carolina, Chapel Hill
Abstract
Noroviruses represent the most important cause of acute gastroenteritis worldwide; however, currently no licensed vaccine exists. Widespread vaccination that minimizes overall norovirus disease burden would benefit the entire population, but targeted vaccination of specific populations such as healthcare workers may further mitigate the risk of severe disease and death in vulnerable populations. While a few obstacles hinder the rapid development of efficacious vaccines, human trials for virus-like particle (VLP)-based vaccines show promise in both immune response and protection studies, with availability of vaccines being targeted over the next 5–10 years. Ongoing work including identification of important norovirus capsid antigenic sites, development of improved model systems, and continued studies in humans will allow improvement of future vaccines. In the meantime, a better understanding of norovirus disease course and transmission patterns can aid healthcare workers as they take steps to protect high-risk populations such as the elderly and immunocompromised individuals from chronic and severe disease.

Clinical Therapeutics
Volume 36, Issue 5, p613-816 May 2014
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Cost Effectiveness and Resource Allocation
(Accessed 7 June 2014)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases
June 2014 - Volume 27 - Issue 3 pp: v-v 211-302
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
April 2014 Volume 14, Issue 1 Pages ii–ii, 1–57
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2014.14.issue-1/issuetoc
[Reviewed earlier]

Development in Practice
Volume 24, Issue 2, 2014
http://www.tandfonline.com/toc/cdip20/current
"Perennial issues Around agriculture, rural development and related water management…"
[No relevant content]

Emerging Infectious Diseases
Volume 20, Number 6—June 2014
http://www.cdc.gov/ncidod/EID/index.htm
[Reviewed earlier]

The European Journal of Public Health
Volume 24 Issue 3 June 2014
http://eurpub.oxfordjournals.org/content/current
[Reviewed earlier]

Eurosurveillance
Volume 19, Issue 22, 05 June 2014
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
[No relevant content]

Global Health: Science and Practice (GHSP)
May 2014 | Volume 2 | Issue 2
http://www.ghspjournal.org/content/current
[No relevant content]

Globalization and Health
[Accessed 7 June 2014]
http://www.globalizationandhealth.com/
Review
The role of law and governance reform in the global response to non-communicable diseases
Roger S Magnusson and David Patterson
Author Affiliations
Globalization and Health 2014, 10:44 doi:10.1186/1744-8603-10-44
Published: 5 June 2014
Abstract (provisional)
Addressing non-communicable diseases ("NCDs") and their risk-factors is one of the most powerful ways of improving longevity and healthy life expectancy for the foreseeable future - especially in low- and middle-income countries. This paper reviews the role of law and governance reform in that process. We highlight the need for a comprehensive approach that is grounded in the right to health and addresses three aspects: preventing NCDs and their risk factors, improving access to NCD treatments, and addressing the social impacts of illness. We highlight some of the major impediments to the passage and implementation of laws for the prevention and control of NCDs, and identify important practical steps that governments can take as they consider legal and governance reforms at country level.We review the emerging global architecture for NCDs, and emphasise the need for governance structures to harness the energy of civil society organisations and to create a global movement that influences the policy agenda at the country level. We also argue that the global monitoring framework would be more effective if it included key legal and policy indicators. The paper identifies priorities for

technical legal assistance in implementing the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020. These include high-quality legal resources to assist countries to evaluate reform options, investment in legal capacity building, and global leadership to respond to the likely increase in requests by countries for technical legal assistance. We urge development agencies and other funders to recognise the need for development assistance in these areas. Throughout the paper, we point to global experience in dealing with HIV and draw out some relevant lessons for NCDs.

Global Public Health
Volume 9, Issue 5, 2014
http://www.tandfonline.com/toc/rgph20/.Uq0DgeKy-F9#.U4onnCjDU1w
[Reviewed earlier]

Health Affairs
June 2014; Volume 33, Issue 6
http://content.healthaffairs.org/content/current
Theme: Economics Of Health Care: Costs, Savings & Value
[No relevant content]

Health and Human Rights
Volume 15, Issue 2
http://www.hhrjournal.org/
[Reviewed earlier]

Health Economics, Policy and Law
Volume 9 / Issue 02 / April 2014
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[Reviewed earlier]

Health Policy and Planning
Volume 29 Issue 3 May 2014
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
June 2014 Volume 10, Issue 6
http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/6/
Review
Commercializing diarrhea vaccines for travelers
Rosa López-Gigosos, Marina Segura-Moreno, Rosa Díez-Díaz, Elena Plaza and Alberto Mariscal
http://dx.doi.org/10.4161/hv.27737
Abstract

Continued growth in international travel and forecasts for a great increase in the number of people who travel from industrialized to emerging and developing countries make it necessary to develop and improve the capacity to provide health protection to travelers. Measures available to prevent some diseases include a currently limited number of marketed vaccines which represent extremely useful tools to protect travelers. Travelers very often experience diarrheal and gastrointestinal diseases for which some vaccines are available. Use of these vaccines should be evaluated based on traveler and travel destination and characteristics. Vaccines available include those against cholera, typhoid fever, hepatitis A, hepatitis E (only available in China), and rotavirus. The aim of this review is to provide an updated summary about each of the abovementioned vaccines that may be useful for making decisions regarding their use and assessing their indications in recommendations for travelers.

Short Report

HPV vaccine uptake after introduction of the vaccine in Germany: An analysis of administrative data

Sabrina Hense, Kathrin Hillebrand, Johannes Horn, Rafael Mikolajczyk, Renate Schulze-Rath and Edeltraut Garbe

http://dx.doi.org/10.4161/hv.28450

Abstract

In Germany, vaccination against human papilloma virus (HPV) is recommended by the German Standing Vaccination Committee (STIKO) since March 2007 for girls aged 12–17 years. The vaccine is free of charge for this age group. Additionally, some statutory health insurance providers (SHI) offer reimbursement for women aged 18–26 years. Currently available information on the uptake or coverage of HPV vaccination is limited to specific regions, age groups, or study populations.

This report describes the HPV vaccine uptake in 2008 for females aged 12–26 years in Germany on a broad regional level based on data from one large SHI. HPV vaccinations were identified by outpatient codes used for reimbursement of vaccine administration. Vaccine uptake was calculated by dividing the number of females, who received at least one HPV vaccine dose by the number of female insurees in the respective age group. The overall study population consisted of 317,234 females, of whom 77,350 received at least one HPV vaccine dose in 2008. Vaccine uptake was 32.2% in the recommended age group, with a peak age at 14–16 years. In the age group of females aged 18–26 years, where HPV vaccination was not officially recommended by the STIKO, uptake was 12.3%. Vaccine uptake in 2008 reflects an early stage after the recommendation of HPV vaccination in 2007. Future changes in vaccine uptake should be further and more promptly monitored.

Research Paper

Knowledge and risk perception of measles and factors associated with vaccination decisions in subjects consulting university affiliated public hospitals in Lyon, France, after measles infection

Abdoulaye Tour, Mitra Saadatian-Elahi, Daniel Floret, Bruno Lina, Jean-Sebastien Casalegno and Philippe Vanhems

Abstract

In 2011, a large number of European countries faced measles outbreaks, France accounting for more than half of the reported cases. The Rhône-Alpes region, located in south-east France, was one of the most affected provinces, with an incidence rate of 97.9 cases per 100,000 inhabitants. We conducted a retrospective survey of adults and parents of children consulting university affiliated public hospitals because of measles infections between January 1, 2010 and September 2012 in Lyon, France. Our main objectives were to evaluate: i) the level of study

population knowledge of measles; ii) vaccination practices; and iii) changes in opinion with regard to measles vaccination after disease onset. Overall, 73.64% of patients were not vaccinated or partially vaccinated. The main reason for non-vaccination in children was inappropriate age while among non-vaccinated adults, 29.3% could not give any reason. In total, 29.1% of the responding parents and 24.2% of adult cases were opposed to vaccination "in principle". Opposition to vaccination "in principle" was the third reason for non-vaccination. A large number of patients did not recognize measles as a serious illness and were unaware of its complications. Among parents of infected children, knowledge of transmission mode (odds ratio (OR) =5.9; 95% confidence interval (95% CI): 1.64-21.26), perceived severity of measles (OR=1.5; 95% CI: 1.06-2.13) and absence of hepatitis B vaccination (OR=0.17; 95% CI: 0.04-0.65) were independently associated with a more positive opinion about measles vaccination after disease onset. In adult patients, low education level (OR=3.39; 95% CI: 1.03-11.11) and lack of knowledge of sequelae (OR=10.19; 95% CI: 1.14-91.31) were linked with a more positive opinion. Individuals affected by vaccine-preventable diseases are interesting populations to study disease impact on vaccine perception.

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 7 June 2014]
[No new relevant content]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 7 June 2014]
[No new relevant content]

International Journal of Epidemiology
Volume 43 Issue 2 April 2014
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Infectious Diseases
Vol 23 Complete | June 2014 | Pages 1-108
http://www.ijidonline.com/current
[Reviewed earlier]

JAMA
June 4, 2014, Vol 311, No. 21
http://jama.jamanetwork.com/issue.aspx
[No relevant content]

JAMA Pediatrics
June 2014, Vol 168, No. 6

http://archpedi.jamanetwork.com/issue.aspx
[No relevant content]

Journal of Community Health
Volume 39, Issue 3, June 2014
http://link.springer.com/journal/10900/39/3/page/1
[Reviewed earlier]

Journal of Global Ethics
Volume 10, Issue 1, 2014
http://www.tandfonline.com/toc/rjge20/current#.U2V-Elf4L0l
Tenth Anniversary Forum: The Future of Global Ethics
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 25, Number 2, May 2014
http://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.25.2.html
[Reviewed earlier]

Journal of Health Organization and Management
Volume 28 issue 3 - Latest Issue
http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest
[No relevant content]

Journal of Infectious Diseases
Volume 209 Issue 11 June 1, 2014
http://jid.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)
Volume 6 | Issue 2 Page Nos. 57-92 April-June 2014
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 16, Issue 3, June 2014
http://link.springer.com/journal/10903/16/3/page/1
[Reviewed earlier]

Journal of Medical Ethics
June 2014, Volume 40, Issue 6
http://jme.bmj.com/content/current
[No relevant content]

Journal of Medical Microbiology
June 2014; 63 (Pt 6)
http://jmm.sgmjournals.org/content/current
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 3 Issue 2 June 2014
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Pediatrics
Vol 164 | No. 6 | June 2014 | Pages 1245-1504
http://www.jpeds.com/current
[Reviewed earlier]

Journal of Public Health Policy
Volume 35, Issue 2 (May 2014)
http://www.palgrave-journals.com/jphp/journal/v35/n2/index.html
[Reviewed earlier]

Journal of the Royal Society – Interface
July 6, 2014; 11 (96)
http://rsif.royalsocietypublishing.org/content/current
[No relevant content]

Journal of Virology
June 2014, volume 88, issue 11
http://jvi.asm.org/content/current
[No relevant content]

The Lancet
Jun 07, 2014 Volume 383 Number 9933 p1945 - 2018
http://www.thelancet.com/journals/lancet/issue/current
[No relevant content]

The Lancet Global Health
Jun 2014 Volume 2 Number 6 e301 - 363
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

The Lancet Infectious Diseases
Jun 2014 Volume 14 Number 6 p441 - 532
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Medical Decision Making (MDM)
May 2014; 34 (4)
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
June 2014 Volume 92, Issue 2 Pages 167–405
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue
[No relevant content]

Nature
Volume 510 Number 7503 pp7-182 5 June 2014
http://www.nature.com/nature/current_issue.html
[No relevant content]

Nature Immunology
June 2014, Volume 15 No 6 pp483-587
http://www.nature.com/ni/journal/v15/n6/index.html
Focus on Post-Transcriptional and Post-Translational Control of Immunity
[Reviewed earlier]

Nature Medicine
June 2014, Volume 20 No 6 pp561-688
http://www.nature.com/nm/journal/v20/n6/index.html
[No relevant content]

Nature Reviews Immunology
June 2014 Vol 14 No 6
http://www.nature.com/nri/journal/v14/n6/index.html
[No relevant content]

New England Journal of Medicine
June 5, 2014 Vol. 370 No. 23
http://www.nejm.org/toc/nejm/medical-journal
[No relevant content]

OMICS: A Journal of Integrative Biology
May 2014, 18(5)
http://online.liebertpub.com/toc/omi/18/5
[No new relevant content]

The Pediatric Infectious Disease Journal
June 2014 - Volume 33 - Issue 6 pp: 549-673,e135-e161
http://journals.lww.com/pidj/pages/currenttoc.aspx
[Reviewed earlier]

Pediatrics
June 2014, VOLUME 133 / ISSUE 6
http://pediatrics.aappublications.org/current.shtml
Article
Timely Versus Delayed Early Childhood Vaccination and Seizures
Simon J. Hambidge, MD, PhDa,b,c,d, Sophia R. Newcomer, MPHa, Komal J. Narwaney, MD, PhDa, Jason M. Glanz, PhDa,d, Matthew F. Daley, MDa,c, Stan Xu, PhDa, Jo Ann Shoupa, Ali Rowhani-Rahbar, MD, PhDe, Nicola P. Klein, MD, PhDf, Grace M. Lee, MD, MPHg,h, Jennifer C. Nelson, MPHi, Marlene Lugg, DrPHj, Allison L. Naleway, PhDk, James D. Nordin, MD, MPHl, Eric Weintraub, MPHm, and Frank DeStefano, MD, MPHm
Author Affiliations
aInstitute for Health Research, Kaiser Permanente Colorado, Denver, Colorado;
bDepartment of Community Health Services, Denver Health, Denver, Colorado;
cDepartment of Pediatrics, University of Colorado School of Medicine, Aurora, Colorado;
dDepartment of Epidemiology, University of Colorado School of Public Health, Aurora, Colorado;
eDepartment of Epidemiology, School of Public Health, University of Washington, Seattle, Washington;
fKaiser Permanente Vaccine Study Center, Oakland, California;
gDepartment of Population Medicine, Harvard Pilgrim Health Care Institute and Harvard Medical School, Boston, Massachusetts;
hDivision of Infectious Diseases and Department of Laboratory Medicine, Boston Children's Hospital, Boston, Massachusetts;
iGroup Health Research Institute, Seattle, Washington;
jDepartment of Research and Evaluation, Southern California Kaiser Permanente, Pasadena, California;
kKaiser Foundation Hospital Center for Health Research, Kaiser Northwest, Portland, Oregon;
lHealth Partners Research Foundation, Minneapolis, Minnesota; and

mImmunization Safety Office, Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia
Abstract
BACKGROUND: Little is known regarding the timing of childhood vaccination and postvaccination seizures.
METHODS: In a cohort of 323 247 US children from the Vaccine Safety Datalink born from 2004 to 2008, we analyzed the association between the timing of childhood vaccination and the first occurrence of seizure with a self-controlled case series analysis of the first doses of individual vaccines received in the first 2 years of life.
RESULTS: In infants, there was no association between the timing of infant vaccination and postvaccination seizures. In the second year of life, the incident rate ratio (IRR) for seizures after receipt of the first measles-mumps-rubella vaccine (MMR) dose at 12 to 15 months was 2.65 (95% confidence interval [CI] 1.99–3.55); the IRR after an MMR dose at 16 to 23 months was 6.53 (95% CI 3.15–13.53). The IRR for seizures after receipt of the first measles-mumps-rubella-varicella vaccine (MMRV) dose at 12 to 15 months was 4.95 (95% CI 3.68–6.66); the IRR after an MMRV dose at 16 to 23 months was 9.80 (95% CI 4.35 –22.06).
CONCLUSIONS: There is no increased risk of postvaccination seizure in infants regardless of timing of vaccination. In year 2, delaying MMR vaccine past 15 months of age results in a higher risk of seizures. The strength of the association is doubled with MMRV vaccine. These findings suggest that on-time vaccination is as safe with regard to seizures as delayed vaccination in the first year of life, and that delayed vaccination in the second year of life is associated with more postvaccination seizures than on-time vaccination.
Article
Duration of Protection After Infant Hepatitis B Vaccination Series
Amy B. Middleman, MD, MSEd, MPHa, Carol J. Baker, MDb, Claudia A. Kozinetz, PhDb, Saleem Kamili, PhDc, Chi Nguyenb, Dale J. Hu, MDc, and Philip R. Spradling, MDc
Author Affiliations
aDepartment of Pediatrics, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma;
bDepartment of Pediatrics, Baylor College of Medicine, Houston, Texas; and
cCenters for Disease Control and Prevention, Atlanta, Georgia
Abstract
BACKGROUND: Little is known about duration of protection after the infant primary series of hepatitis B (HB) vaccine in settings of low HB endemicity. This study sought to determine the proportion of adolescents immunized as infants who had protective titers of antibody to hepatitis B surface antigen (anti-HBs) before and after a challenge dose of vaccine.
METHODS: US-born 16- through 19-year-olds who received a recombinant HB vaccine 3-dose series initiated within 7 days of birth (group 1) or at ≥4 weeks of age (group 2) and completed by 12 months of age were enrolled. Participants had serologic testing before and 2 weeks after randomization to receive a challenge dose of 10 μg or 20 μg of Engerix-B. Baseline and postchallenge levels of anti-HBs were compared by group, challenge dosage, and demographic and behavioral characteristics.
RESULTS: At baseline, 24% had protective anti-HBs levels of ≥10 IU/mL; 92% achieved protective levels after challenge dose. Although group 1 had a lower proportion of seroprotection at baseline, group and challenge dosage were not associated with postchallenge proportion of seroprotection. Being in group 2, higher test dosage, higher baseline geometric mean titer, and nonwhite race were associated with significantly higher geometric mean titer after challenge dose.

CONCLUSIONS: More than 90% of study participants immunized against HB as infants exhibited a seroprotective response to a challenge dose of vaccine. Duration of protection from the primary infant HB vaccine series extended through the adolescent years in the setting of low HB endemicity.

Pharmaceutics
Volume 6, Issue 2 (June 2014), Pages 195-
http://www.mdpi.com/1999-4923/6/1
[Reviewed earlier; No relevant content]

Pharmacoeconomics
Volume 32, Issue 6, June 2014
http://link.springer.com/journal/40273/32/5/page/1
Are Current Cost-Effectiveness Thresholds for Low- and Middle-Income Countries Useful? Examples from the World of Vaccines
A. T. Newall, M. Jit, R. Hutubessy
Abstract
The World Health Organization's CHOosing Interventions that are Cost Effective (WHO-CHOICE) thresholds for averting a disability-adjusted life-year of one to three times per capita income have been widely cited and used as a measure of cost effectiveness in evaluations of vaccination for low- and middle-income countries (LMICs). These thresholds were based upon criteria set out by the WHO Commission on Macroeconomics and Health, which reflected the potential economic returns of interventions. The CHOICE project sought to evaluate a variety of health interventions at a subregional level and classify them into broad categories to help assist decision makers, but the utility of the thresholds for within-country decision making for individual interventions (given budgetary constraints) has not been adequately explored. To examine whether the 'WHO-CHOICE thresholds' reflect funding decisions, we examined the results of two recent reviews of cost-effectiveness analyses of human papillomavirus and rotavirus vaccination in LMICs, and we assessed whether the results of these studies were reflected in funding decisions for these vaccination programmes. We found that in many cases, programmes that were deemed cost effective were not subsequently implemented in the country. We consider the implications of this finding, the advantages and disadvantages of alternative methods to estimate thresholds, and how cost perspectives and the funders of healthcare may impact on these choices.

PLoS One
[Accessed 7 June 2014]
http://www.plosone.org/
Research Article
Epidemic Process over the Commute Network in a Metropolitan Area
Kenta Yashima mail,
Akira Sasaki
Published: June 06, 2014
DOI: 10.1371/journal.pone.0098518

Abstract
An understanding of epidemiological dynamics is important for prevention and control of epidemic outbreaks. However, previous studies tend to focus only on specific areas, indicating that application to another area or intervention strategy requires a similar time-consuming simulation. Here, we study the epidemic dynamics of the disease-spread over a commute network, using the Tokyo metropolitan area as an example, in an attempt to elucidate the general properties of epidemic spread over a commute network that could be used for a prediction in any metropolitan area. The model is formulated on the basis of a metapopulation network in which local populations are interconnected by actual commuter flows in the Tokyo metropolitan area and the spread of infection is simulated by an individual-based model. We find that the probability of a global epidemic as well as the final epidemic sizes in both global and local populations, the timing of the epidemic peak, and the time at which the epidemic reaches a local population are mainly determined by the joint distribution of the local population sizes connected by the commuter flows, but are insensitive to geographical or topological structure of the network. Moreover, there is a strong relation between the population size and the time that the epidemic reaches this local population and we are able to determine the reason for this relation as well as its dependence on the commute network structure and epidemic parameters. This study shows that the model based on the connection between the population size classes is sufficient to predict both global and local epidemic dynamics in metropolitan area. Moreover, the clear relation of the time taken by the epidemic to reach each local population can be used as a novel measure for intervention; this enables efficient intervention strategies in each local population prior to the actual arrival.

Research Article

The Potential Cost-Effectiveness of Quadrivalent versus Trivalent Influenza Vaccine in Elderly People and Clinical Risk Groups in the UK: A Lifetime Multi-Cohort Model

Laure-Anne Van Bellinghen, Genevieve Meier mail, Ilse Van Vlaenderen
Published: June 06, 2014
DOI: 10.1371/journal.pone.0098437
Abstract
Objective
To estimate the potential cost-effectiveness of quadrivalent influenza vaccine compared with trivalent influenza vaccine in the UK.
Methods
A lifetime, multi-cohort, static Markov model was constructed, with nine age groups each divided into healthy and at-risk categories. Influenza A and B were accounted for separately. The model was run in one-year cycles for a lifetime (maximum age: 100 years). The analysis was from the perspective of the UK National Health Service. Costs and benefits were discounted at 3.5%. 2010 UK vaccination policy (vaccination of people at risk and those aged ≥65 years) was applied. Herd effect was not included. Inputs were derived from national databases and published sources where possible. The quadrivalent influenza vaccine price was not available when the study was conducted. It was estimated at £6.72,15% above the trivalent vaccine price of £5.85. Sensitivity analyses used an incremental price of up to 50%.
Results
Compared with trivalent influenza vaccine, the quadrivalent influenza vaccine would be expected to reduce the numbers of influenza cases by 1,393,720, medical visits by 439,852 complications by 167,357, hospitalisations for complications by 26,424 and influenza deaths by 16,471. The estimated base case incremental cost-effectiveness ratio (ICER) was £5,299/quality-adjusted life-year (QALY). Sensitivity analyses indicated that the ICER was

sensitive to changes in circulation of influenza virus subtypes and vaccine mismatch; all other parameters had little effect. In 96% of simulations the ICER was <£20,000/QALY. Since this analysis was completed, quadrivalent influenza vaccine has become available in the UK at a list price of £9.94. Using this price in the model, the estimated ICER for quadrivalent compared with trivalent vaccination was £27,378/QALY, still within the NICE cost-effectiveness threshold (£20,000-£30,000).

Conclusions

Quadrivalent influenza vaccine could reduce influenza disease burden and would be cost-effective compared with trivalent influenza vaccine in elderly people and clinical risk groups in the UK.

Research Article

Direct Effect of 10-Valent Conjugate Pneumococcal Vaccination on Pneumococcal Carriage in Children Brazil

Ana Lucia Andrade mail, Yves Mauro Ternes, Maria Aparecida Vieira, Weslley Garcia Moreira, Juliana Lamaro-Cardoso, André Kipnis, Maria Regina Cardoso, Maria Cristina Brandileone, Iaci Moura, Fabiana C. Pimenta, Maria da Gloria Carvalho, Fabricia Oliveira Saraiva, Cristiana Maria Toscano, Ruth Minamisava

Published: June 03, 2014

DOI: 10.1371/journal.pone.0098128

Abstract

Background

10-valent conjugate pneumococcal vaccine/PCV10 was introduced in the Brazilian National Immunization Program along the year of 2010. We assessed the direct effectiveness of PCV10 vaccination in preventing nasopharyngeal/NP pneumococcal carriage in infants.

Methods

A cross-sectional population-based household survey was conducted in Goiania Brazil, from December/2010-February/2011 targeting children aged 7–11 m and 15–18 m. Participants were selected using a systematic sampling. NP swabs, demographic data, and vaccination status were collected from 1,287 children during home visits. Main outcome and exposure of interest were PCV10 vaccine-type carriage and dosing schedules (3p+0, 2p+0, and one catch-up dose), respectively. Pneumococcal carriage was defined by a positive culture and serotyping was performed by Quellung reaction. Rate ratio/RR was calculated as the ratio between the prevalence of vaccine-types carriage in children exposed to different schedules and unvaccinated for PCV10. Adjusted RR was estimated using Poisson regression. PCV10 effectiveness/VE on vaccine-type carriage was calculated as 1-RR*100.

Results

The prevalence of pneumococcal carriage was 41.0% (95%CI: 38.4–43.7). Serotypes covered by PCV10 and PCV13 were 35.2% and 53.0%, respectively. Vaccine serotypes 6B (11.6%), 23F (7.8%), 14 (6.8%), and 19F (6.6%) were the most frequently observed. After adjusted for confounders, children who had received 2p+0 or 3p+0 dosing schedule presented a significant reduction in pneumococcal vaccine-type carriage, with PCV10 VE equal to 35.9% (95%CI: 4.2–57.1; p = 0.030) and 44.0% (95%CI: 14.–63.5; p = 0.008), respectively, when compared with unvaccinated children. For children who received one catch-up dose, no significant VE was detected (p = 0.905).

Conclusion

PCV10 was associated with high protection against vaccine-type carriage with 2p+0 and 3p+0 doses for children vaccinated before the second semester of life. The continuous evaluation of

carriage serotypes distribution is likely to be useful for evaluating the long-term effectiveness and impact of pneumococcal vaccination on serotypes reduction.

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 7 June 2014)
Research Article
Efficacy of Pneumococcal Nontypable Haemophilus influenzae Protein D Conjugate Vaccine (PHiD-CV) in Young Latin American Children: A Double-Blind Randomized Controlled Trial

Miguel W. Tregnaghi, Xavier Sáez-Llorens mail, Pio López, Hector Abate, Enrique Smith, Adriana Pósleman, Arlene Calvo, Digna Wong, Carlos Cortes-Barbosa, Ana Ceballos, Marcelo Tregnaghi, Alexandra Sierra, Mirna Rodriguez, [...], on behalf of the COMPAS Group
Published: June 03, 2014
DOI: 10.1371/journal.pmed.1001657
Abstract
Background
The relationship between pneumococcal conjugate vaccine–induced antibody responses and protection against community-acquired pneumonia (CAP) and acute otitis media (AOM) is unclear. This study assessed the impact of the ten-valent pneumococcal nontypable Haemophilus influenzae protein D conjugate vaccine (PHiD-CV) on these end points. The primary objective was to demonstrate vaccine efficacy (VE) in a per-protocol analysis against likely bacterial CAP (B-CAP: radiologically confirmed CAP with alveolar consolidation/pleural effusion on chest X-ray, or non-alveolar infiltrates and C-reactive protein ≥ 40 μg/ml); other protocol-specified outcomes were also assessed.
Methods and Findings
This phase III double-blind randomized controlled study was conducted between 28 June 2007 and 28 July 2011 in Argentine, Panamanian, and Colombian populations with good access to health care. Approximately 24,000 infants received PHiD-CV or hepatitis control vaccine (hepatitis B for primary vaccination, hepatitis A at booster) at 2, 4, 6, and 15–18 mo of age. Interim analysis of the primary end point was planned when 535 first B-CAP episodes, occurring ≥2 wk after dose 3, were identified in the per-protocol cohort. After a mean follow-up of 23 mo (PHiD-CV, n = 10,295; control, n = 10,201), per-protocol VE was 22.0% (95% CI: 7.7, 34.2; one-sided p = 0.002) against B-CAP (conclusive for primary objective) and 25.7% (95% CI: 8.4%, 39.6%) against World Health Organization–defined consolidated CAP. Intent-to-treat VE was 18.2% (95% CI: 5.5%, 29.1%) against B-CAP and 23.4% (95% CI: 8.8%, 35.7%) against consolidated CAP. End-of-study per-protocol analyses were performed after a mean follow-up of 28–30 mo for CAP and invasive pneumococcal disease (IPD) (PHiD-CV, n = 10,211; control, n = 10,140) and AOM (n = 3,010 and 2,979, respectively). Per-protocol VE was 16.1% (95% CI: −1.1%, 30.4%; one-sided p = 0.032) against clinically confirmed AOM, 67.1% (95% CI: 17.0%, 86.9%) against vaccine serotype clinically confirmed AOM, 100% (95% CI: 74.3%, 100%) against vaccine serotype IPD, and 65.0% (95% CI: 11.1%, 86.2%) against any IPD. Results were consistent between intent-to-treat and per-protocol analyses. Serious adverse events were reported for 21.5% (95% CI: 20.7%, 22.2%) and 22.6% (95% CI: 21.9%, 23.4%) of PHiD-CV and control recipients, respectively. There were 19 deaths (n = 11,798; 0.16%) in the PHiD-CV group and 26 deaths (n = 11,799; 0.22%) in the control group. A significant study limitation was the lower than expected number of captured AOM cases.

Conclusions
Efficacy was demonstrated against a broad range of pneumococcal diseases commonly encountered in young children in clinical practice.

PLoS Neglected Tropical Diseases
May 2014
http://www.plosntds.org/article/browseIssue.action
[Reviewed earlier]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
(Accessed 7 June 2014)
http://www.pnas.org/content/early/
[No new relevant content]

Pneumonia
Vol 4 (2014)
https://pneumonia.org.au/index.php/pneumonia/issue/current
[Reviewed earlier]

Public Health Ethics
Volume 7 Issue 1 April 2014
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Qualitative Health Research
June 2014; 24 (6)
http://qhr.sagepub.com/content/current
[Reviewed earlier; No relevant content]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
April 2014 Vol. 35, No. 4
http://www.paho.org/journal/index.php?option=com_content&view=article&id=143&Itemid=236&lang=en
Contribution of Mexico's Universal Immunization Program to the Fourth Millennium Development Goal [Contribución del Programa de Vacunación Universal de México al cuarto Objetivo de Desarrollo del Milenio]
Vesta Richardson,1 Edgar Sánchez-Uribe,1 Marcelino Esparza-Aguilar,1 Alejandra Esteves-Jaramillo,1 and Lorena Suárez-Idueta1
Abstract
Objective. To identify and describe 1) progress achieved thus far in meeting the commitments

of the Fourth Millennium Development Goal (MDG 4) in Mexico, mainly the contribution of the Universal Immunization Program (UIP) over the last 20 years, and 2) new opportunities for further reducing mortality among children under 5 years old.
Methods. An observational, descriptive, retrospective study was carried out to examine registered causes of death in children under 5 between 1990 and 2010. Indicators were built according to the recommendations of the United Nations.
Results. In 2010, deaths among children under 5 decreased 64.3% compared to the baseline (1990) figure. Of the total deaths of the children under 5, the neonatal period was the most affected (52.8%), followed by the 1 to 11 months (30.9%), and the 12 to 59 months (16.2%) groups. A 34% overall mortality reduction was observed after the universalization of immunization
against influenza, rotavirus, and pneumococcus in children under 5.
Conclusions. Despite a significant reduction in under-5 mortality in Mexico over the last 20 years, largely due to the successes of the UIP, several challenges remain, particularly in improving preventive and curative services during pre- and postnatal care.

La desigualdad en salud de grupos vulnerables de México: adultos mayores, indígenas y migrantes [Health inequality among vulnerable groups in Mexico: older adults, indigenous people, and migrants]

Clara Juárez-Ramírez, Margarita Márquez-Serrano, Nelly Salgado de Snyder, Blanca Estela elcastre-Villafuerte, María Guadalupe Ruelas-González y Hortensia Reyes-Morales

Synopsis

Health vulnerability refers to a lack of protection for specific population groups with specific health problems, as well as the disadvantages they face in solving them in comparison with other population groups. This major public health problem has multiple and diverse causes, including a shortage of trained health care personnel and the lack of family, social, economic, and institutional support in obtaining care and minimizing health risks. Health vulnerability is a dynamic condition arising from the confluence of multiple social determinants. This article attempts to describe the health situation of three vulnerable groups in Mexico—older adults, indigenous people, and migrants—and, after defining the needs of each, explore measures that could contribute to the design and implementation of public health policies better tailored to their respective needs.

Risk Analysis

May 2014 Volume 34, Issue 5 Pages 789–980
http://onlinelibrary.wiley.com/doi/10.1111/risa.2014.34.issue-5/issuetoc
[Reviewed earlier; No relevant content]

Science

6 June 2014 vol 344, issue 6188, pages 1057-1196
http://www.sciencemag.org/current.dtl
Special Issue: Rethinking the Global Supply Chain
Introduction to Special Issue

Rethinking the global supply chain

Brad Wible, Jeffrey Mervis, Nicholas S. Wigginton

We are all part of a global economy, capable of producing and transporting seemingly anything, from anywhere, to anyone. Its lifeblood is an interconnected network of suppliers and

producers, retailers and consumers, spanning the planet. But the public typically knows far more about Apple, Nike, and other brands than the logistics empires many tiers below, where firms such as Foxconn and Pou Chen connect vast underlying commodity and labor markets that are relatively hidden from the public eye. This sprawling web of supply chains can raise living standards, improve conditions for workers, and help alleviate poverty. But feeding its unquenchable thirst for energy, water, and other resources puts a strain on the planet. Finding ways to relieve that strain is an enormous challenge and will undoubtedly require greater traceability and transparency.

One step forward is providing better measurements and models and making efforts to standardize and coordinate their use. Researchers are intensely studying how to account for supply-chain demands on ecosystems by integrating carbon, water, energy, and other "footprints" into coordinated schemes (see Hoekstra and Wiedmann, p. 1114). They are also developing better ways to inventory material and energy inputs, from the conception of a product to its grave, via life-cycle assessment tools (see Hellweg and Milà i Canals, p. 1109).

Yet academic insights alone cannot solve these problems. The large-scale cooperation of industry is essential. Many companies and industries are seeking to improve how they collect, synthesize, standardize, and communicate supply-chain data to better inform decision-making (see O'Rourke, p. 1124). A study of the Brazilian Amazon shows how supply-chain initiatives in the beef and soy industries, interacting with economic, social, and policy drivers, can slow deforestation of one of the world's major sources of biodiversity and carbon sequestration (see Nepstad et al., p. 1118).

Logistics and transportation are also ripe for improvement. One approach is drawing inspiration from the digital Internet to create a Physical Internet. The initiative envisions using standardized "packets" and protocols for shipping, and forging the types of industry-wide partnerships that are normally anathema to a free-market system, but perhaps necessary to reduce the congestion, pollution, and inefficiency that make the current system ultimately unsustainable (see Mervis, p. 1104). Although many companies may initially be motivated by improved efficiencies and profit margins, such improvements in supply chains hold out the hope of improving conditions for humanity (see Dooley, p. 1108).

Online: Podcast at www.sciencemag.org/special/supply

Social Science & Medicine
Volume 113, In Progress (July 2014)
http://www.sciencedirect.com/science/journal/02779536/113/supp/C
[Reviewed earlier]

Tropical Medicine and Health
Vol. 42(2014) No. 1
https://www.jstage.jst.go.jp/browse/tmh/42/1/_contents
[Reviewed earlier; No relevant content]

Vaccine
Volume 32, Issue 31, Pages 3879-4012 (30 June 2014)
http://www.sciencedirect.com/science/journal/0264410X/32/31

Acceptability of the human papillomavirus vaccine and reasons for non-vaccination among parents of adolescent sons

Pages 3883-3885

Kelly L. Donahue, Nathan W. Stupiansky, Andreia B. Alexander, Gregory D. Zimet

Abstract

Routine administration of the quadrivalent human papillomavirus (HPV) vaccine has been recommended for 11–12-year-old males since 2011, but coverage remains low. In a U.S. national sample of parents of 11–17-year-old males (n = 779), 78.6% of parents reported their sons had not received the HPV vaccine. The most common reason for non-vaccination (56.7%) was "My doctor or healthcare provider has not recommended it." Parents citing only logistical reasons for non-vaccination (e.g., lack of recommendation, access, or education, n = 384) reported significantly higher vaccine acceptability than parents reporting a combination of attitudinal (e.g., concerns about vaccine safety or efficacy) and logistical barriers (n = 92), while parents citing only attitudinal barriers (n = 73) reported the lowest level of vaccine acceptability. In sum, many parents are willing but have not vaccinated sons due to logistical barriers, most commonly lack of healthcare provider recommendation. These findings have important implications for increasing HPV vaccination coverage among adolescent males.

Challenges in vaccination of neonates, infants and young children

Review Article

Pages 3886-3894

Michael E. Pichichero

Abstract

All neonates, infants and young children receive multiple priming doses and booster vaccinations in the 1st and 2nd year of life to prevent infections by viral and bacterial pathogens. Despite high vaccine compliance, outbreaks of vaccine-preventable infections are occurring worldwide. These data strongly argue for an improved understanding of the immune responses of neonates, infants and young children to vaccine antigens and further study of the exploitable mechanisms to achieve more robust and prolonged immunity with fewer primary and booster vaccinations in the pediatric population. This review will focus on our recent work involving infant and young child immunity following routine recommended vaccinations. The discussion will address vaccine responses with respect to four areas: (1) systemic antibody responses, (2) memory B-cell generation, (3) CD4 T-cell responses, and (4) APC function.

How very young men who have sex with men view vaccination against human papillomavirus

Original Research Article

Pages 3936-3941

Huachun Zou, Andrew E. Grulich, Alyssa M. Cornall, Sepehr N. Tabrizi, Suzanne M. Garland, Garrett Prestage, Catriona S. Bradshaw, Jane S. Hocking, Andrea Morrow, Christopher K. Fairley, Marcus Y. Chen

Abstract

Background

HPV vaccination of men who have sex with men (MSM) prior to the commencement of sexual activity would have the maximum impact on preventing HPV and anal cancer in this population. However, knowledge and attitudes towards HPV vaccination among very young MSM have not been previously studied.

Methods

Two hundred MSM aged 16 to 20 were recruited via community and other sources. Participants were asked about their knowledge and attitudes towards HPV and HPV vaccination.

Results
Most (80%, 95% confidence interval (CI) 72.2–87.2%) men were not willing to purchase the vaccine because of its cost (AUD$450). However, if the vaccine was offered to MSM free of charge, 86% (95% CI: 80–90%) reported they would be willing to disclose their sexuality to a health care provider in order to obtain the vaccine. Over half (54%, 95%: 47–61%) of men would only be willing to disclose their sexuality to receive the HPV vaccine after their first experience of anal intercourse. The age at first insertive anal intercourse and the age at first receptive anal intercourse were 0.21 (IQR: −2.5 to 3.2) and 0.17 (IQR: −2.9 to 2.7) years earlier than the age that men would be willing to disclose their sexuality to receive the HPV vaccine, respectively. Willingness to receive the vaccine at a younger age was associated with younger age at first insertive anal intercourse.
Conclusion
Overall, very young MSM expressed high acceptance of HPV vaccination. Early, opportunistic vaccination of very young MSM may be feasible in settings where very young MSM have not been vaccinated through universal programs targeting school aged males. However, given HPV infections occur early on, the effectiveness of this approach will be less than vaccination targeting school aged boys.

Vaccine
Volume 32, Issue 29, Pages 3569-3712 (17 June 2014)
http://www.sciencedirect.com/science/journal/0264410X/32/29

Effectiveness of typhoid vaccination in US travelers

Pages 3577-3579
Barbara E. Mahon, Anna E. Newton, Eric D. Mintz
Abstract
Typhoid vaccination is recommended in the United States before travel to countries where typhoid fever is endemic, though little information is available on its effectiveness in travelers. We estimated typhoid vaccination effectiveness (VE) by comparing vaccination status in cases of typhoid fever and paratyphoid fever (Salmonella Paratyphi A infection, against which typhoid vaccine offers no protection) reported in the United States. We included travelers to Southern Asia and excluded persons <2 years old and cases in which vaccination status was not reported.
From 2008 through 2011, 744 eligible cases (602 typhoid, 142 paratyphoid A) were reported to CDC. Typhoid vaccination was reported for 5% (29/602) of typhoid patients and for 20% (29/142) of paratyphoid A patients. Estimated VE was 80% (95% confidence interval, 66–89%). Because of missing data, we could not estimate VE for specific vaccines.
We demonstrated moderate effectiveness of typhoid vaccination in US travelers, supporting vaccination recommendations.

Vaccines are not associated with autism: An evidence-based meta-analysis of case-control and cohort studies

Original Research Article
Pages 3623-3629
Luke E. Taylor, Amy L. Swerdfeger, Guy D. Eslick
Abstract
There has been enormous debate regarding the possibility of a link between childhood vaccinations and the subsequent development of autism. This has in recent times become a major public health issue with vaccine preventable diseases increasing in the community due to the fear of a 'link' between vaccinations and autism. We performed a meta-analysis to

summarise available evidence from case-control and cohort studies on this topic (MEDLINE, PubMed, EMBASE, Google Scholar up to April, 2014). Eligible studies assessed the relationship between vaccine administration and the subsequent development of autism or autism spectrum disorders (ASD). Two reviewers extracted data on study characteristics, methods, and outcomes. Disagreement was resolved by consensus with another author. Five cohort studies involving 1,256,407 children, and five case-control studies involving 9,920 children were included in this analysis. The cohort data revealed no relationship between vaccination and autism (OR: 0.99; 95% CI: 0.92 to 1.06) or ASD (OR: 0.91; 95% CI: 0.68 to 1.20), nor was there a relationship between autism and MMR (OR: 0.84; 95% CI: 0.70 to 1.01), or thimerosal (OR: 1.00; 95% CI: 0.77 to 1.31), or mercury (Hg) (OR: 1.00; 95% CI: 0.93 to 1.07). Similarly the case-control data found no evidence for increased risk of developing autism or ASD following MMR, Hg, or thimerosal exposure when grouped by condition (OR: 0.90, 95% CI: 0.83 to 0.98; p = 0.02) or grouped by exposure type (OR: 0.85, 95% CI: 0.76 to 0.95; p = 0.01). Findings of this meta-analysis suggest that vaccinations are not associated with the development of autism or autism spectrum disorder. Furthermore, the components of the vaccines (thimerosal or mercury) or multiple vaccines (MMR) are not associated with the development of autism or autism spectrum disorder.

Perceptions of personal belief vaccine exemption policy: A survey of Arizona vaccine providers

Original Research Article

Pages 3630-3635

Steven D. Haenchen, Elizabeth T. Jacobs, Kristin N. Bratton, Aubri S. Carman, Eyal Oren, Heidi L. Pottinger, Jessica A. Regan, Kacey C. Ernst

Abstract

Background

As exemptions to school-entry requirements rise, vaccination rates in Arizona school children are approaching levels that may threaten public health. Understanding the interactions physicians have with vaccine-hesitant parents, as well as the opinions physicians hold regarding vaccination, exemption, and exemption policies, are critical to our understanding of, and ability to affect, vaccination exemption rates among children.

Methods

Survey responses were elicited from practitioners listed in The Arizona Partnership for Immunization and the Arizona Medical Association databases using a multi-pronged recruitment approach. Respondents provided data regarding their practice, comfort with parental refusal of individual vaccines, opinions about the beliefs held by parents that seek exemptions, parent education strategies, issues regarding providing care to unvaccinated children, and potential changes to Arizona policy.

Results

A total of 152 practitioners providing care to a wide geographic and economic population of Arizona responded to the survey. Respondents were generally strong advocates of all immunizations but were more accepting of parents' desires to refuse hepatitis B and rotavirus vaccines. Almost all providers indicated that they see patients whose parents request to refuse or delay from vaccinations at least occasionally (88% and 97%, respectively). Only 37% of respondents indicated that they would be supportive of a policy requiring them to sign off on a parent's decision to refuse vaccination.

Conclusions

Vaccination providers in Arizona are generally very supportive of childhood immunizations but have varying comfort with exemption from individual vaccines. Responding providers tended to

not support a requirement for a physician's signature for vaccine exemptions due to varying concerns regarding the implementation of such a practice.

Cluster randomized trial of a toolkit and early vaccine delivery to improve childhood influenza vaccination rates in primary care

Original Research Article
Pages 3656-3663
Richard K. Zimmerman, Mary Patricia Nowalk, Chyongchiou Jeng Lin, Kristin Hannibal, Krissy K. Moehling, Hsin-Hui Huang, Annamore Matambanadzo, Judith Troy, Norma J. Allred, Greg Gallik, Evelyn C. Reis

Abstract

Purpose

To increase childhood influenza vaccination rates using a toolkit and early vaccine delivery in a randomized cluster trial.

Methods

Twenty primary care practices treating children (range for n = 536–8183) were randomly assigned to Intervention and Control arms to test the effectiveness of an evidence-based practice improvement toolkit (4 Pillars Toolkit) and early vaccine supplies for use among disadvantaged children on influenza vaccination rates among children 6 months–18 years. Follow-up staff meetings and surveys were used to assess use and acceptability of the intervention strategies in the Intervention arm. Rates for the 2010–2011 and 2011–2012 influenza seasons were compared. Two-level generalized linear mixed modeling was used to evaluate outcomes.

Results

Overall increases in influenza vaccination rates were significantly greater in the Intervention arm (7.9 percentage points) compared with the Control arm (4.4 percentage points; $P < 0.034$). These rate changes represent 4522 additional doses in the Intervention arm vs. 1390 additional doses in the Control arm. This effect of the intervention was observed despite the fact that rates increased significantly in both arms – 8/10 Intervention (all $P < 0.001$) and 7/10 Control sites (P-values = 0.04 to <0.001). Rates in two Intervention sites with pre-intervention vaccination rates >58% did not significantly increase. In regression analyses, a child's likelihood of being vaccinated was significantly higher with: younger age, white race (Odds ratio [OR] = 1.29; 95% confidence interval [CI] = 1.23–1.34), having commercial insurance (OR = 1.30; 95%CI = 1.25–1.35), higher pre-intervention practice vaccination rate (OR = 1.25; 95%CI = 1.16–1.34), and being in the Intervention arm (OR = 1.23; 95%CI = 1.01–1.50). Early delivery of influenza vaccine was rated by Intervention practices as an effective strategy for raising rates.

Conclusions

Implementation of a multi-strategy toolkit and early vaccine supplies can significantly improve influenza vaccination rates among children in primary care practices but the effect may be less pronounced in practices with moderate to high existing vaccination rates.

Vaccine: Development and Therapy

(Accessed 7 June 2014)
http://www.dovepress.com/vaccine-development-and-therapy-journal
[No new relevant content]

Vaccines — Open Access Journal
(Accessed 7 June 2014)
http://www.mdpi.com/journal/vaccines
[No new relevant content]

Value in Health
Vol 17 | No. 3 | May 2014
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

WHO South-East Asia Journal of Public Health
Volume 3, Issue 1, January-March 2014, 1-122
http://www.searo.who.int/publications/journals/seajph/issues/whoseajphv3n1/en/
Special Issue on Vector-borne diseases
[Reviewed earlier]

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

Value in Health Regional Issues
Volume 3, Pages 146-155
Economic Impact of Pneumococcal Protein-D Conjugate Vaccine (PHiD-CV) on the Malaysian National Immunization Programme
Syed Aljunid, Namaitijiang Maimaiti, Zafar Ahmed, Amrizal Muhammad Nur, Zaleha Md Isa, Soraya Azmi, Saperi Sulong
Abstract
Objective
To assess the cost-effectiveness of introducing pneumococcal polysaccharide and nontypeable Haemophilus influenzae protein D conjugate vaccine (PHiD-CV) in the National Immunization Programme of Malaysia. This study compared introducing PHiD-CV (10 valent vaccine) with current no vaccination, as well as against the alternative 13-valent pneumococcal conjugate vaccine (PCV13).
Methods
A lifetime Markov cohort model was adapted using national estimates of disease burden, outcomes of pneumococcal disease, and treatment costs of disease manifestations including pneumonia, acute otitis media, septicemia, and meningitis for a hypothetical birth cohort of 550,000 infants. Clinical information was obtained by review of medical records from four public hospitals in Malaysia from the year 2008 to 2009. Inpatient cost from the four study hospitals was obtained from a diagnostic-related group–based costing system. Outpatient cost was estimated using clinical pathways developed by an expert panel. The perspective assessed was that of the Ministry of Health, Malaysia.
Results
The estimated disease incidence was 1.2, 3.7, 70, and 6.9 per 100,000 population for meningitis, bacteremia, pneumonia, and acute otitis media, respectively. The Markov model

predicted medical costs of Malaysian ringgit (RM) 4.86 billion (US $1.51 billion) in the absence of vaccination. Vaccination with PHiD-CV would be highly cost-effective against no vaccination at RM30,290 (US $7,407) per quality-adjusted life-year gained. On comparing PHiD-CV with PCV13, it was found that PHiD-CV dominates PCV13, with 179 quality-adjusted life-years gained while saving RM35 million (US $10.87 million).
Conclusions
It is cost-effective to incorporate pneumococcal vaccination in the National Immunization Programme of Malaysia. Our model suggests that PHiD-CV would be more cost saving than PCV13 from the perspective of the Ministry of Health of Malaysia.

European Scientific Journal
May 2014 edition vol.10, No.15 ISSN: 1857 – 7881
[PDF] **PROGRESS TOWARDS MEASLES ELIMINATION IN MOROCCO**
Touria Benamar, National Institute of Hygiene / Ministry of Health, Rabat, Morocco; Amal Alla Imad Cherkaoui, Epidemiology Department / Ministry of Health, Rabat, Morocco; Latifa Tajounte, Ahmed Laskri, National Institute of Hygiene / Ministry of Health, Rabat, Morocco; Moncef Ziani, Epidemiology Department / Ministry of Health, Rabat, Morocco; Abdelkarim Filali-Maltouf, Microbiology and Molecular Biology Laboratory, Faculty of Sciences, University Mohammed V, Rabat, Morocco; Rajae El Aouad, National Institute of Hygiene / Ministry of Health, Rabat, Morocco; School of Medicine and Pharmacy. University Mohamed V Souissi
Abstract
In order to eliminate measles in Morocco, a mass vaccination campaign targeting children aged from 9 months to14 years was conducted on May-June 2008. The vaccination coverage was estimated to be 99%. This study aims to assess the impact of the measles mass vaccination campaign on measles incidence based on sensitive surveillance system. For this purpose, a laboratory case-based surveillance was set up during 2010. Epidemiological definition of suspected measles cases was fixed. Specimens were collected through all primary health centers and hospitals at national level and suspected cases were confirmed by serological tests. Measles strains isolated during outbreaks were genotyped. The performance of the surveillance system was evaluated according to the World Health Organization indicators. The incidence was calculated based on the epidemiological surveillance data, and compared to the World Health Organization incidence, which is 1 case per million per year. 1214 suspected cases were notified and 1083 measles samples were analyzed and 45 % (491/1083) were serologically confirmed and 115 cases were confirmed by epidemiological linkage. Molecular 228 epidemiology shows that genotype D4 is endemic since 2008. The WHO indicators show that the sensitivity of surveillance system is low. Despite this weak sensitivity, epidemiological data show that measles incidence is higher than that recommended by WHO, and reached 19.18/1,000,000. In conclusions, Measles mass campaign did not reach the goal expected. A second mass campaign should be planned in the near future to eliminate the disease in the country.

The Neurohospitalist
May 28, 2014 1941874414533352
http://nho.sagepub.com/content/4/2.toc
Poliomyelitis Historical Facts, Epidemiology, and Current Challenges in Eradication
Man Mohan Mehndiratta, MD, DM, MNAMS, FAMS, FRCP1 Prachi Mehndiratta, MD2, Renuka Pande, MD3
1Department of Neurology, Janakpuri Superspeciality Hospital, Janakpuri, New Delhi, India

2Department of Neurology, subspecialty division Vascular neurology-StrokeDepartment of Neurology, subspecialty division Vascular neurology-Stroke, University of Virginia, Charlottesville, VA, USA
3Department of Microbiology, Janakpuri Superspeciality Hospital, New Delhi, India
Man Mohan Mehndiratta, Janakpuri Superspeciality Hospital, C-2/B, Janakpuri, New Delhi 110058, India.
Abstract
Poliomyelitis is a highly infectious disease caused by a virus belonging to the Picornaviridae family. It finds a mention even in ancient Egyptian paintings and carvings. The clinical features are varied ranging from mild cases of respiratory illness, gastroenteritis, and malaise to severe forms of paralysis. These have been categorized into inapparent infection without symptoms, mild illness (abortive poliomyelitis), aseptic meningitis (nonparalytic poliomyelitis), and paralytic poliomyelitis. This disease has been associated with crippling deformities affecting thousands of lives throughout the world. Only due to the perseverance and determination of great scientists in 1900s, the genomic structure of the virus and its pathogenesis could be elucidated. Contribution of Salk and Sabin in the form of vaccines—oral polio vaccine (OPV) and the inactivated polio vaccine—heralded a scientific revolution. In 1994, the World Health Organization (WHO) Region of The Americas was certified polio free followed by the WHO Western Pacific Region in 2000 and the WHO European Region in June 2002 of the 3 types of wild poliovirus (types 1, 2, and 3). In 2013, only 3 countries remained polio endemic—Nigeria, Pakistan, and Afghanistan. Global eradication of polio is imperative else the threat of an outbreak will hover forever. Today, all the governments of the world in collaboration with WHO stand unified in their fight against poliomyelitis and the task when achieved will pave the way for eliminating other infections in future.

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://www.aljazeera.com/Services/Search/?q=vaccine
Accessed 7 June 2014
[No new, unique, relevant content]

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 7 June 2014

[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 7 June 2014
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 7 June 2014
[No new, unique, relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 7 June 2014
[No new, unique, relevant content]

Economist
http://www.economist.com/
Accessed 7 June 2014
[No new, unique, relevant content]

Financial Times
http://www.ft.com
Accessed 7 June 2014
The A-List
June 1, 2014
Pakistan's polio disgrace
...Osama bin Laden was hiding in a house there. We all know the outcome of that, but since then the Taliban claim that polio vaccine is an American attempt to sterilise tribeswomen. The government's failure has been its inability to tell the truth, conduct... Ahmed Rashid

Forbes
http://www.forbes.com/
Accessed 7 June 2014
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 7 June 2014
[No new, unique, relevant content]

Foreign Policy
http://www.foreignpolicy.com/
Accessed 7 June 2014
[No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/
Accessed 7 June 2014
[No new, unique, relevant content]

The Huffington Post
http://www.huffingtonpost.com/
Accessed 7 June 2014
[No new, unique, relevant content]

Le Monde
http://www.lemonde.fr/
Accessed 7 June 2014
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 7 June 2014
Blog: Comment
The Political Fight Against Polio
Where does polio refuse to die? The three countries where it remains endemic are Pakistan, Afghanistan, and Nigeria.
by Sarah Stillman

New York Times
http://www.nytimes.com/
Accessed 7 June 2014
[No new, unique, relevant content]

Reuters
http://www.reuters.com/
Accessed 7 June 2014
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 7 June 2014
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 7 June 2014
Ciro de Quadros, pioneering epidemiologist, dies at 74
Dr. de Quadros directed efforts that led to the eradication of polio and measles in the Americas.

* * * *

Vaccines and Global Health: The Week in Review *is a service of the Center for Vaccines Ethics and Policy (CVEP) which is solely responsible for its content. Support for this service is provided by its governing institutions – Department of Medical Ethics, NYU Medical School; The Wistar Institute Vaccine Center and the Children's Hospital of Philadelphia Vaccine Education Center. Additional support is provided by the PATH Vaccine Development Program and the International Vaccine Institute (IVI), by the Bill & Melinda Gates Foundation, and by vaccine industry leaders including Janssen, Pfizer,* and *Sanofi Pasteur U.S. (list in formation), as well as the Developing Countries Vaccine Manufacturers Network (DCVMN). Support is also provided by a growing list of individuals who use this service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.*

* * * *