

Center for Vaccine Ethics and Policy

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Vaccines and Global Health: The Week in Review 4 January 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

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The Week in Review resumes publication covering the two week holiday period.

WHO – Humanitarian Health Action

WHO and partners launch measles vaccination in Central African Republic BANGUI, Central African Republic

Excerpt

2 January 2014 - Following the confirmation by the Bangui Pasteur Institute of cases of measles in two camps for displaced persons – near Bangui airport (3 cases) and at the Don Bosco Centre in Damala (5 cases) - WHO, UNICEF, MSF and other partners will support an emergency response immunization campaign to control this epidemic starting Friday, 3 January 2014. More than 60,000 children aged between 6 months and 15 years will be covered by the immunization activities: 40,000 at the airport camp and more than 20,000 at the other affected site, the Don Bosco Centre at Damala. WHO teams visited the two sites on Tuesday 31 December 2013 to investigate the cases. The displaced population at the airport camp, one of the most densely populated in Bangui, is estimated by OCHA to be 100,000. MSF Belgium is the principal operational partner in the response effort, with responsibility among other things for medical and surgical emergencies. "We have already positioned 13 vaccination teams at 3 sites in the airport camp," explained Loris De Filippi, MSF operations manager, adding that MSF has already mobilized 50,000 doses of vaccine for the response campaign. Other partners such as MdM and ALIMA have also strengthened surveillance at a number of other sites in Bangui to cope with this health emergency.

<http://www.who.int/entity/hac/crises/caf/car-measles-vaccination-campaign-20140102.pdf>

Update: Polio this week - As of 18 December 2013 [last update published]

Global Polio Eradication Initiative

Full report: <http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx>

[Editor's extract and bolded text]

As the year 2013 draws to a close, the GPEI takes stock:

:: In Afghanistan, no indigenous cases of wild poliovirus have occurred all year - all cases are linked to cross-border transmission with neighbouring Pakistan.

:: In Nigeria, poliovirus is increasingly geographically restricted - primarily to Kanad and Borno states. Over the past 4 months, only four cases have occurred in the country, despite the onset of the rainy season (the "high season" for polio transmission).

:: The Horn of Africa outbreak is on the decline, including in Banadir, Somalia, the "engine" of the outbreak (no cases since July).

:: A cross-regional emergency approach is being implemented in the Middle East.

:: In Pakistan, the main reservoir area is Federally Administered Tribal Areas (FATA), in particular North Waziristan. During the 'high season' in the past four months, 52 cases of wild poliovirus have been reported from FATA, with evidence of widespread geographic transmission across the country. Areas within Pakistan are being re-infected, as is neighbouring Afghanistan, and the outbreak in the Middle East originated in Pakistan.

:: The overriding operational priority for the GPEI is to ensure all children are reached during supplementary immunization activities during the 2014 'low season' for polio transmission.

Pakistan

:: One new WPV1 case was reported in the past week from North Waziristan, FATA. The total number of WPV1 cases for Pakistan in 2013 is now 75. The most recent WPV1 case had onset of paralysis on 26 November (from North Waziristan, FATA).

:: North Waziristan is the area with the largest number of children being paralyzed by poliovirus in Pakistan. Immunization activities have been suspended by local leaders since June 2012. It is critical that children in all areas are vaccinated and protected from poliovirus. Immunizations in neighbouring high-risk areas are being intensified, to further boost population immunity levels in those areas and prevent further spread of this outbreak.

UNICEF proposal: Anti-polio media to become more Pakhtun-centric

The Express Tribune (Pakistan) (1/2)

ISLAMABAD:

The Pakhtun-dominated areas pose the biggest challenge to polio eradication efforts in Pakistan and to counter it the government, along with its international partners, has planned to devise a localised communication strategy.

"There will be a strategic shift in 2014 to integrate Pakhtun social norms in to all components of communication strategy with a focus on reaching key tribes," said a UNICEF report.

The UNICEF disclosed the revised communication plan in a presentation given to the Prime Minister's Focal Person on Polio Eradication Ayesha Raza Farooq.

The Extended Programme on Immunization (EPI) National Programme Manager Dr Rana Muhammad Safdar, who is also coordinator for the PM polio cell said it remained a fact that the polio teams faced various issues to vaccinate children in Pakhtun-dominated areas across Pakistan.

"In Peshawar alone there are 50 high-risk areas in terms of security where the polio teams cannot go," Dr Safdar said.

According to the copy of Unicef presentation available with The Express Tribune, the plan would include amplifying Pakhtun voices in national media discourse and minimise Global Polio Eradication Initiative (GPEI) voices.

Unicef suggested re-profiling the vaccinators and frontline workers as protectors of children among others...

Vaccination supervisor killed, 2 workers injured in attack at Pakistan hospital

The New York Times (tiered subscription model) (12/28)

ISLAMABAD, Pakistan — A health worker supervising a polio vaccination campaign was fatally shot and two others were wounded on Saturday when gunmen opened fire at a hospital in northwestern Pakistan, officials said.

No one immediately took responsibility for the killing, but the Taliban, which accuses the United States of using a drive to eradicate polio in the country as a cover for spying, has threatened the lives of health workers who immunize children.

Pakistani officials said two gunmen riding a motorbike had opened fire at a government hospital in Matni, a suburb of Peshawar, the provincial capital of the restive Khyber-Pakhtunkhwa Province. Zahid Gul, who was overseeing the vaccination campaign, was killed and another man and a woman were wounded in the attack. The gunmen fled.

Saturday's episode was a particular setback to the former cricket star and current opposition leader Imran Khan, whose political party controls Khyber-Pakhtunkhwa....

WHO: Global Alert and Response (GAR) – *Disease Outbreak News*

http://www.who.int/csr/don/2013_03_12/en/index.html

:: Middle East respiratory syndrome coronavirus (MERS-CoV) - update [3 January 2014](#)

On 31 December 2013, WHO has been informed of an additional laboratory-confirmed case of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in United Arab Emirates.

The case is a 33 year-old male healthcare worker in Dubai who was in contact with the confirmed MERS-CoV case reported to WHO on 20 December. He developed symptoms on 27 December, and was hospitalized on 28 December with bilateral pneumonia, acute renal failure and thrombocytopenia. The patient has underlying history of bronchial asthma and chronic kidney disease. The case was laboratory confirmed for MERS-CoV on 29 December 2013. The patient is in critical but stable condition.

Globally, from September 2012 to date, WHO has been informed of a total of 177 laboratory-confirmed cases of infection with MERS-CoV, including 74 deaths.

Based on the current situation and available information, WHO encourages all Member States to continue their surveillance for severe acute respiratory infections (SARI) and to carefully review any unusual patterns...

:: Middle East respiratory syndrome coronavirus (MERS-CoV) - update [27 December 2013](#)

:: Middle East respiratory syndrome coronavirus (MERS-CoV) – update [22 December 2013](#)

GAVI Watch: Media Releases/Statements [to 4 January 2014]

<http://www.gavialliance.org/library/news/statements/>

No new relevant content

UNICEF Watch

http://www.unicef.org/media/media_67204.html

No new relevant content

CDC/MMWR Watch [to 4 January 2014]

No new relevant content

European Medicines Agency Watch [to 4 January 2014]

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

No new relevant content

UN Watch [to 4 January 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

World Bank/IMF Watch [to 4 January 2014]

Selected media releases and other selected content relevant to immunization, vaccines, infectious diseases, global health, etc. <http://www.worldbank.org/en/news/all>

No new relevant content.

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

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

Editor's Note:

This digest does not usually include notice of the many market research products available about various segments of the vaccines market, but occasionally a study will provide important scaling data or other analysis we believe helpful to our readers as below. CVEP does not endorse any market research report per se or any market research firm.

Market Research: Vaccine Market - Global Forecasts To 2022

By Technology & Types, Trend Analysis By Various Classes - Live / Attenuated, Subunit, Toxoid, Conjugate, DNA, Recombinant Vector, Synthetic, Dendritic Vaccines And By Indications - Infectious Diseases, Cancer, Allergy, Diabetes, Cardiovascular Disease With Market Landscape Analysis

Excerpt of announcement

"...The global vaccine technology market is anticipated to reach around US\$84 billion by 2022, growing at a CAGR of 11.36%. The potential growth of the market is attributed towards therapeutic vaccines, allergy vaccines, and emerging-disease vaccines. Improved understanding of immunology, new technological breakthroughs in the development

of a new class of vaccines, namely, recombinant vector vaccines, DNA vaccines, and dendritic vaccines coupled with excellent distribution channels are propelling the growth of this market. Furthermore, a large population base in emerging economies and a high prevalence of diseases is driving the market, which is expected to remain consistent in the coming years...

...The vaccine technology market is an established segment and is widely accepted as an indispensable division of the healthcare industry. It is poised to grow rapidly by addressing the following issues: emerging infectious agents, various types of cancer, allergies, cardiovascular diseases, diabetes, smoke cessation, and neurodegenerative disorders. The global vaccine market is estimated at \$32.05 billion in 2013 and is expected to reach \$84.44 billion by 2022...

http://www.researchandmarkets.com/publication/m3iqw76/vaccine_market_by_technology_types_various

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 13, Issue 12, 2013

http://www.tandfonline.com/toc/uajb20/current#.Uhk8Az_hfIY

Special Issue Focus: *The SUPPORT Controversy and the Debate Over Research Within the Standard of Care*

[Reviewed earlier]

American Journal of Infection Control

Vol 42 | No. 1 | January 2014 | Pages 1-92

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

Hospital-onset influenza hospitalizations—United States, 2010-2011

[Michael A. Jung](#), MD, [Tiffany D'Mello](#), MPH, [Alejandro Pérez](#), MPH, [Deborah Aragon](#), MSPH, [Nancy M. Bennett](#), MD, [Tara Cooper](#), MPH, [Monica M. Farley](#), MD, [Brian Fowler](#), MPH, [Stephen M. Grube](#), MD, [Emily B. Hancock](#), MS, [Ruth Lynfield](#), MD, [Craig Morin](#), MPH, [Arthur Reingold](#), MD, [Patricia Ryan](#), MS, [William Schaffner](#), MD, [Ruta Sharangpani](#), MD, [Leslie Tengelsen](#), PhD, [Ann Thomas](#), MD, [Diana Thurston](#), PhD, [Kimberly Yousey-Hindes](#), MPH, [Shelley Zansky](#), PhD, [Lyn Finelli](#), DrPH, [Sandra S. Chaves](#), MD

published online 01 November 2013.

<http://www.ajicjournal.org/article/S0196-6553%2813%2901098-5/abstract>

Abstract

Background

Seasonal influenza is responsible for more than 200,000 hospitalizations each year in the United States. Although hospital-onset (HO) influenza contributes to morbidity and mortality among these patients, little is known about its overall epidemiology.

Objective

We describe patients with HO influenza in the United States during the 2010-2011 influenza season and compare them with community-onset (CO) cases to better understand factors associated with illness.

Methods

We identified laboratory-confirmed, influenza-related hospitalizations using the Influenza Hospitalization Surveillance Network (FluSurv-NET), a network that conducts population-based surveillance in 16 states. CO cases had laboratory confirmation ≤ 3 days after hospital admission; HO cases had laboratory confirmation > 3 days after admission.


Results

We identified 172 (2.8%) HO cases among a total of 6,171 influenza-positive hospitalizations. HO and CO cases did not differ by age ($P = .22$), sex ($P = .29$), or race ($P = .25$). Chronic medical conditions were more common in HO cases (89%) compared with CO cases (78%) ($P < .01$), and a greater proportion of HO cases (42%) than CO cases (17%) were admitted to the intensive care unit ($P < .01$). The median length of stay after influenza diagnosis of HO cases (7.5 days) was greater than that of CO cases (3 days) ($P < .01$).

Conclusion

HO cases had greater length of stay and were more likely to be admitted to the intensive care unit or die compared with CO cases. HO influenza may play a role in the clinical outcome of hospitalized patients, particularly among those with chronic medical conditions.

Association between health care workers' knowledge of influenza vaccine and vaccine uptake

[Oluwatosin Jaiyeoba](#), MD, MSCR, [Margaret Villers](#), MD, MSCR, [David E. Soper](#), MD, [Jeffrey Korte](#), PhD, [Cassandra D. Salgado](#), MD, MS 

published online 31 October 2013.

[Abstract](#)

Immunization is the most effective measure available to prevent influenza and its complications, and health care workers (HCWs) play a pivotal role. We conducted a cross-sectional survey study to determine HCWs knowledge and opinions regarding influenza vaccine and its acceptance at our institution. The most important reason for vaccine uptake was because it required formal declination (33%); physicians were more likely to be vaccinated because of patient care, whereas nurses were more likely to be vaccinated because it required formal declination.

American Journal of Preventive Medicine

[Volume 46, Issue 1](#) , Pages 1-9, January 2014

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

[Reviewed earlier]

American Journal of Public Health

Volume 104, Issue 1 (January 2014)

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

[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

December 2013; 89 (6)

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

[Reviewed earlier]

Annals of Internal Medicine

17 December 2013, Vol. 159. No. 12

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

[Reviewed earlier; No relevant content]

BMC Public Health

(Accessed 4 January 2014)

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

[No new relevant content]

British Medical Bulletin

Volume 108 Issue 1 December 2013

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

[Reviewed earlier]

British Medical Journal

04 January 2014 (Vol 348, Issue 7939)

<http://www.bmj.com/content/348/7939>

[No relevant content]

Bulletin of the World Health Organization

Volume 92, Number 1, January 2014, 1-76

<http://www.who.int/bulletin/volumes/92/1/en/index.html>

[No relevant content]

Clinical Therapeutics

Vol 35 | No. 12 | December 2013 | Pages 1865-2058

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

[No relevant content]

Cost Effectiveness and Resource Allocation

(Accessed 4 January 2014)

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

[No new relevant content]

Current Opinion in Infectious Diseases

February 2014 - Volume 27 - Issue 1 pp: v-vi,1-114

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

[No relevant content]

Developing World Bioethics

December 2013 Volume 13, Issue 3 Pages ii-ii, 105-170

<http://onlinelibrary.wiley.com/doi/10.1111/dewb.2013.13.issue-3/issuetoc>

[Reviewed earlier]

Development in Practice

[Volume 23](#), Issue 7, 2013

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

[Reviewed earlier; No relevant content]

Emerging Infectious Diseases

Volume 20, Number 1—January 2014

<http://www.cdc.gov/ncidod/EID/index.htm>

[Dynamic Modeling of Cost-effectiveness of Rotavirus Vaccination, Kazakhstan](#)

B. Freiesleben de Blasio et al.

[PDF Version](#)

Abstract

The government of Kazakhstan, a middle-income country in Central Asia, is considering the introduction of rotavirus vaccination into its national immunization program. We performed a cost-effectiveness analysis of rotavirus vaccination spanning 20 years by using a synthesis of dynamic transmission models accounting for herd protection. We found that a vaccination program with 90% coverage would prevent ≈ 880 rotavirus deaths and save an average of 54,784 life-years for children <5 years of age. Indirect protection accounted for 40% and 60% reduction in severe and mild rotavirus gastroenteritis, respectively. Cost per life year gained was US \$18,044 from a societal perspective and US \$23,892 from a health care perspective. Comparing the 2 key parameters of cost-effectiveness, mortality rates and vaccine cost at <US \$2.78 per dose, vaccination program costs would be entirely offset. To further evaluate efficacy of a vaccine program, benefits of indirect protection conferred by vaccination warrant further study.

The European Journal of Public Health

Volume 23 Issue 6 December 2013

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

[Reviewed earlier]

Eurosurveillance

Volume 18, Issue 50, 12 December 2013

<http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678>

[Reviewed earlier]

Forum for Development Studies

[Volume 40](#), Issue 3, 2013

<http://www.tandfonline.com/toc/sfds20/current>

[Reviewed earlier; No relevant content]

Globalization and Health

[Accessed 4 January 2014]

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

[No new relevant content]

Global Health Governance

<http://blogs.shu.edu/ghg/category/complete-issues/summer-2013/>

[No new relevant content]

Global Health: Science and Practice (GHSP)

November 2013 | Volume 1 | Issue 3

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

[Reviewed earlier]

Global Public Health

Volume 8, Issue 10, 2013

<http://www.tandfonline.com/toc/rgph20/current#.Uq0DgeKy-F9>

[Reviewed earlier]

Health Affairs

December 2013; Volume 32, Issue 12

<http://content.healthaffairs.org/content/current>

Theme: The Future Of Emergency Medicine: Challenges & Opportunities

[Reviewed earlier; 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 01 - January 2014

<http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue>

[No relevant content]

Health Policy and Planning

Volume 29 Issue 1 January 2014

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

An alternative mechanism for international health aid: evaluating a Global Social Protection Fund

[Sanjay Basu^{1,*}](#), [David Stuckler^{2,3}](#) and [Martin McKee²](#)

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Accepted December 19, 2012.

<http://heapol.oxfordjournals.org/content/29/1/127.abstract>

Abstract

Several public health groups have called for the creation of a global fund for 'social protection'—a fund that produces the international equivalent of domestic tax collection and safety net systems to finance care for the ill and disabled and related health costs. All participating countries would pay into a global fund based on a metric of their ability to pay and withdraw from the common pool based on a metric of their need for funds. We assessed how alternative strategies and metrics by which to operate such a fund would affect its size and impact on health system financing. Using a mathematical model, we found that common targets for health funding in low-income countries require higher levels of aid expenditures than presently distributed. Some mechanisms exist that may incentivize reduction of domestic health inequalities, and direct most funds towards the poorest populations. Payments from high-income countries are also likely to decrease over time as middle-income countries' economies grow.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

January 2014 Volume 10, Issue 1

<http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/1/>

Research Paper

[Human rotavirus vaccine \(RIX4414\) efficacy in the first two years of life: A randomized, placebo-controlled trial in China](#)

Rong-cheng Li, Teng Huang, YanPing Li, Dong Luo, Junhui Tao, Botao Fu, Guoai Si, Yi Nong, Zhaojun Mo, XueYan Liao, Ivy Luan, Haiwen Tang, Niraj Rathi, Naveen...

<http://dx.doi.org/10.4161/hv.26319>

Abstract

Rotaviruses (RV) are a major cause of severe gastroenteritis (GE) in children aged <5 y. For the first time in China, we assessed the efficacy of two oral doses of the human rotavirus vaccine (RIX4414) in infants during the first two years of life (113808/NCT01171963). Healthy infants aged 6–16 weeks were randomized (1:1) to receive two oral doses of either the RIX4414 vaccine/placebo according to a 0, 1 month schedule. Vaccine efficacy (VE) against severe RVGE was assessed from two weeks post-Dose 2 up until the end of the second RV season and calculated with its 95% confidence intervals (CI). The primary efficacy objective was met if the lower limit of the 95% CI on VE was $\geq 10\%$. Unsolicited symptoms reported during the 31-d post-vaccination follow-up period and serious adverse events (SAEs) reported throughout the study were assessed. Of 3333 enrolled infants, 3148 were included in the according-to-protocol efficacy cohort. Over two consecutive RV seasons, fewer severe RVGE episodes were reported in the RIX4414 group ($n = 21$) vs. the placebo group ($n = 75$). VE against severe RVGE was 72% (95% CI: 54.1–83.6); the lower limit of the 95% CI on VE was $> 10\%$. The number of unsolicited symptoms and SAEs reported was similar between both groups. Thirteen deaths (RIX4414 = 6; placebo = 7) occurred during the study. All SAEs and deaths in the RIX4414 group were considered unrelated to vaccination. Two oral doses of RIX4414 vaccine provided a substantial level of protection against severe RVGE in Chinese children during the first two years of life.

Research Paper

Outbreak-related mumps vaccine effectiveness among a cohort of children and of young adults in Germany 2011

Anja Takla, Merle M Böhmer, Christina Klinc, Norbert Kurz, Alice Schaffer, Heribert Stich, Petra Stöcker, Ole Wichmann and Judith Koch

<http://dx.doi.org/10.4161/hv.26642>

Abstract

Mumps-outbreaks in populations with high two-dose vaccination coverage and among young adults are increasingly reported. However, data on the duration of vaccine-induced protection conferred by mumps-vaccines are scarce. As part of a supra-regional outbreak in Germany 2010/11, we conducted two retrospective cohort studies in a primary school and among adult ice hockey teams to determine mumps vaccine effectiveness (VE). Via questionnaires we collected information on demography, clinical manifestations, and reviewed vaccination cards. We estimated VE as $1 - RR$, RR being the rate ratio of disease among two-times or one-time mumps-vaccinated compared with unvaccinated persons. The response rate was 92.6% (100/108—children cohort) and 91.7% (44/48—adult cohort). Fourteen cases were identified in the children and 6 in the adult cohort. In the children cohort (mean age: 9 y), 2-dose VE was 91.9% (95%CI 81.0–96.5%). In the adult cohort (mean age: 26 y), no cases occurred among the 13 2-times vaccinated, while 1-dose VE was 50.0% (95%CI –9.4–87.1%). Average time since last vaccination showed no significant difference for cases and non-cases, but cases were younger at age of last mumps-vaccination (children cohort: 2 vs. 3 y, $P = 0.04$; adult cohort: 1 vs. 4 y, $P = 0.03$). We did not observe signs of waning immunity in the children cohort. Due to the small sample size VE in the adult cohort should be interpreted with caution. Given the estimated VE, very high 2-dose vaccination coverage is required to prevent future outbreaks. Intervention efforts to increase coverage must especially target young adults who received <2 vaccinations during childhood.

Research Paper

Seroprevalence of pertussis in China: Need to improve vaccination strategies

Yinghua Xu, Lichan Wang, Jin Xu, Xinjian Wang, Chen Wei, Peng Luo, Xiao Ma, Qiming Hou and Junzhi Wang

<http://dx.doi.org/10.4161/hv.26335>

Research Paper

Vaccine providers' perspectives on impact, challenges, and response during the California 2010 pertussis outbreak

Jessica L Silvaggio, Joshua Van Otterloo, Eileen A Curran, Ellen AS Whitney, Paul S Weiss, Katherine Seib and Saad B Omer

<http://dx.doi.org/10.4161/hv.26438>

Abstract

Introduction: California has experienced its worst outbreak of pertussis in 50 y. In preparing for such outbreaks of pertussis, vaccine providers in the state play a key role in educating patients about the public health implications of vaccination, explaining the benefits to immunization, and facilitating patients' receipt of recommended immunizations.

Methods: We conducted a survey of 800 California vaccine providers to investigate provider level response to recent pertussis outbreaks and regulation by provider type and geography.

Results: Sixty-nine percent (533/777) of vaccine providers within the state of California responded to the survey. Fifty-three percent (278/527) of vaccine providers indicated that it was part of standard care at their practice or pharmacy location to ask adult patients about pertussis vaccine (Table 1) and this varied across practice types ($P < 0.0001$). Fifty-seven percent of providers (270/476) indicated that the information they received from the state about pertussis during the 2010 California pertussis outbreak was very useful or useful, while 52% of providers indicated this information was neutral, not useful, not at all useful. Vaccine administration, patient groups seen, and challenges varied by provider type however meaningful differences among subpopulations to which the vaccine was administered were found between provider types ($P < 0.001$, Table 2).

Conclusion: The 2010 pertussis outbreak in California challenged vaccine providers in a way that changed the preparation, promotion, and planning for future outbreaks and emergency situations. Adaptability to the new state law and increased awareness of pertussis in the physician community were important in the number of patients receiving the vaccine. Also, forming partnerships with schools and health agencies were important in facilitating and promoting wide spread vaccination.

Research Paper

Focusing on flu: Adolescents' perspectives on school-located immunization programs for influenza vaccine

Mary B Short and Amy B Middleman

<http://dx.doi.org/10.4161/hv.26332>

Abstract

Introduction: To describe adolescents' perspectives regarding the use of school-located immunization programs (SLIP) for influenza vaccination. More importantly, adolescents were asked what factors would make them more or less likely to use a SLIP offering influenza vaccine.

Methods: Focus groups using nominal group method were conducted with middle and high school students in a large, urban school district. Responses were recorded by each school, and then, responses were ranked across all participating schools for each question.

Results: Participants were generally found to be knowledgeable about influenza and to have positive attitudes toward receiving the vaccine via SLIP. Students were more willing to participate in a SLIP if it were low cost or free, less time-consuming than going to a doctor, and if they felt they could trust vaccinators. Overall, high school and middle school students ranked the benefits of SLIP similarly to each other.

Conclusions: A wide range of issues are important to middle and high school students when considering participation in SLIPs including convenience, public health benefits, trust in the program, program safety, and sanitary issues. Further research will be needed regarding the generalizability of these findings to larger populations of students.

Short Report

Guillain-Barre syndrome following quadrivalent human papillomavirus vaccination among vaccine-eligible individuals in the United States

Rohit P Ojha, Bradford E Jackson, Joseph E Tota, Tabatha N Offutt-Powell, Karan P Singh and Sejong Bae

<http://dx.doi.org/10.4161/hv.26292>

Abstract

Post-marketing surveillance studies provide conflicting evidence about whether Guillain-Barre syndrome occurs more frequently following quadrivalent human papillomavirus (HPV4) vaccination. We aimed to assess whether Guillain-Barre syndrome is reported more frequently following HPV4 vaccination than other vaccinations among females and males aged 9 to 26 y in the United States. We used adverse event reports received by the United States Vaccine Adverse Event Reporting System (VAERS) between January 1, 2010 and December 31, 2012 to estimate overall, age-, and sex-specific proportional reporting ratios (PRRs) and corresponding X2 values for reports of Guillain-Barre syndrome between 5 and 42 d following HPV vaccination. Minimum criteria for a signal using this approach are 3 or more cases, $PRR \geq 2$, and $X^2 \geq 4$. Guillain-Barre syndrome was listed as an adverse event in 45 of 14 822 reports, of which 9 reports followed HPV4 vaccination and 36 reports followed all other vaccines. The overall, age-, and sex-specific PRR estimates were uniformly below 1. In addition, the overall, age-, and sex-specific X2 values were uniformly below 3. Our analysis of post-marketing surveillance data does not suggest that Guillain-Barre syndrome is reported more frequently following HPV4 vaccination than other vaccinations among vaccine-eligible females or males in the United States. Our findings may be useful when discussing the risks and benefits of HPV4 vaccination.

Infectious Agents and Cancer

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

[Accessed 4 January 2014]

[No new relevant content]

Infectious Diseases of Poverty

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

[Accessed 4 January 2014]

[No new relevant content]

International Journal of Epidemiology

Volume 42 Issue 5 October 2013

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

[Reviewed earlier; No relevant content]

International Journal of Infectious Diseases

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

[Reviewed earlier; No relevant content]

JAMA

January 1, 2014, Vol 311, No. 1

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

[No relevant content]

December 25, 2013, Vol 310, No. 24

[No relevant content]

JAMA Pediatrics

December 2013, Vol 167, No. 12

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

[Reviewed earlier]

Journal of Community Health

Volume 38, Issue 6, December 2013

<http://link.springer.com/journal/10900/38/6/page/1>

[Reviewed earlier]

Journal of Health Organization and Management

Volume 27 issue 6 - Latest Issue

<http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest>

[Reviewed earlier; No relevant content]

Journal of Infectious Diseases

Volume 209 Issue 2 January 15, 2014

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

[No relevant content]

Journal of Global Ethics

[Volume 9](#), Issue 3, 2013

http://www.tandfonline.com/toc/rjge20/current#.UqNh2OKy_Kc

[Reviewed earlier; No relevant content]

Journal of Global Infectious Diseases (JGID)

October-December 2013 Volume 5 | Issue 4 Page Nos. 125-186

<http://www.jgid.org/currentissue.asp?sabs=n>

[No relevant content]

Journal of Medical Ethics

January 2014, Volume 40, Issue 1

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

[No relevant content]

Journal of Medical Microbiology

January 2014; 63 (Pt 1)

<http://jmm.sgmjournals.org/content/current>

[No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 2 Issue 4 December 2013

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

[Reviewed earlier]

Journal of Pediatrics

Vol 164 | No. 1 | January 2014 | Pages 1-222

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

Personal Health Record Use and Association with Immunizations and Well-Child Care Visits Recommendations

Portions of this study were presented as a poster at Kaiser Permanente's Hawaii Research Symposium, November 12, 2012, Honolulu, HI.

[Jeffrey O. Tom](#), MD, MS, [Chuhe Chen](#), PhD, [Yi Yvonne Zhou](#), PhD

Received 20 May 2013; received in revised form 24 July 2013; accepted 22 August 2013.
published online 14 October 2013.

[Abstract](#)

Objective

To determine the association of parental use of integrated personal health records (PHRs) with children's adherence to immunization and well-child care (WCC) visit recommendations.

Study design

For the immunization and WCC visit measures, we retrospectively analyzed, respectively, 766 and 639 matched pairs at Kaiser Permanente (KP) Hawaii and 2795 and 2448 pairs at KP Northwest who were ≤ 31 days old at enrollment and continuously enrolled for 2 years between January 2007 and July 2011. The independent variable (≥ 1 PHR feature used vs none) was matched using propensity scores on parental and children characteristics. The dependent variables were 2 measures from the 2010 Healthcare Effectiveness Data and Information Set: combination 2 immunization (all immunizations vs $< \text{all}$) and number of WCC visits through 15 months old (≥ 6 vs < 6). We conducted multivariate logistic, propensity score-matched regression adjusting for parents' education and child's continuity of care.

Results

Children whose parents used ≥ 1 PHR feature (vs none) had higher odds of adhering to the recommended immunizations only at KP Northwest (KP Hawaii: OR 1.1, 95% CI 0.8-1.4, $P > .05$; KP Northwest OR 1.2, 95% CI 1.0-1.3, $P < .05$). PHR use was associated with better

adherence to WCC visit recommendations for both KP Hawaii (OR 1.9, 95% CI 1.3-2.9, $P < .001$) and KP Northwest (OR 2.5, 95% CI 2.1-2.9, $P < .001$).

Conclusions

Young children whose parents used a PHR were more likely to adhere to the recommended WCC visits in both regions but immunizations in only 1 region.

Journal of Public Health Policy

Volume 34, Issue 4 (November 2013)

<http://www.palgrave-journals.com/jphp/journal/v34/n4/index.html>

[Reviewed earlier]

Journal of the Royal Society – Interface

March 6, 2014; 11 (92)

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

[No relevant content]

Journal of Virology

January 2014, volume 88, issue 2

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

[No relevant content]

The Lancet

Jan 04, 2014 Volume 383 Number 9911 p1 – 98 e1 – 2

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

Comment

Loosening the grip of meningococcal disease in Africa

Johannes Elias

[Preview](#) |

[Full Text](#) | [PDF](#)

Although incidence rates of meningococcal disease in developed countries have steadily decreased over the past century, the disease remains a formidable public health threat in Africa. The geographical area most affected has been named the meningitis belt and includes countries of the Sahel and sub-Saharan Africa. New findings from the study by Doumagoum Daugla and colleagues¹ in *The Lancet* confirm the effectiveness of one shot of a glycoconjugate vaccine (serogroup A meningococcal polysaccharide–tetanus toxoid conjugate vaccine [PsA–TT, MenAfriVac]), developed under the Meningitis Vaccine Project (MVP),² against disease caused by and carriage of serogroup A meningococci in Chad.

Effect of a serogroup A meningococcal conjugate vaccine (PsA–TT) on serogroup A meningococcal meningitis and carriage in Chad: a community study

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[Chandramohan](#) PhD i, [M Hassan-King](#) PhD i, [O Manigart](#) PhD i, [M Nascimento](#) PhD i, [A Woukeu](#) PhD i, [C Trotter](#) PhD h, [JM Stuart](#) FFPH i, [MCJ Maiden](#) PhD f, Prof [BM Greenwood](#) MD i
<http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2813%2961612-8/abstract>

Summary

Background

A serogroup A meningococcal polysaccharide—tetanus toxoid conjugate vaccine (PsA—TT, MenAfriVac) was licensed in India in 2009, and pre-qualified by WHO in 2010, on the basis of its safety and immunogenicity. This vaccine is now being deployed across the African meningitis belt. We studied the effect of PsA—TT on meningococcal meningitis and carriage in Chad during a serogroup A meningococcal meningitis epidemic.

Methods

We obtained data for the incidence of meningitis before and after vaccination from national records between January, 2009, and June, 2012. In 2012, surveillance was enhanced in regions where vaccination with PsA—TT had been undertaken in 2011, and in one district where a reactive vaccination campaign in response to an outbreak of meningitis was undertaken. Meningococcal carriage was studied in an age-stratified sample of residents aged 1–29 years of a rural area roughly 13–15 and 2–4 months before and 4–6 months after vaccination. Meningococci obtained from cerebrospinal fluid or oropharyngeal swabs were characterised by conventional microbiological and molecular methods.

Findings

Roughly 1·8 million individuals aged 1–29 years received one dose of PsA—TT during a vaccination campaign in three regions of Chad in and around the capital N'Djamena during 10 days in December, 2011. The incidence of meningitis during the 2012 meningitis season in these three regions was 2·48 per 100 000 (57 cases in the 2·3 million population), whereas in regions without mass vaccination, incidence was 43·8 per 100 000 (3809 cases per 8·7 million population), a 94% difference in crude incidence ($p<0\cdot0001$), and an incidence rate ratio of 0·096 (95% CI 0·046–0·198). Despite enhanced surveillance, no case of serogroup A meningococcal meningitis was reported in the three vaccinated regions. 32 serogroup A carriers were identified in 4278 age-stratified individuals (0·75%) living in a rural area near the capital 2–4 months before vaccination, whereas only one serogroup A meningococcus was isolated in 5001 people living in the same community 4–6 months after vaccination (adjusted odds ratio 0·019, 95% CI 0·002–0·138; $p<0\cdot0001$).

Interpretation

PSA—TT was highly effective at prevention of serogroup A invasive meningococcal disease and carriage in Chad. How long this protection will persist needs to be established.

Funding

The Bill & Melinda Gates Foundation, the Wellcome Trust, and Médecins Sans Frontières.

Viewpoint

From sovereignty to solidarity: a renewed concept of global health for an era of complex interdependence

Julio Frenk, Octavio Gómez-Dantés, Suerie Moon

[Preview](#) |

[Full Text](#) | [PDF](#)

The moment is ripe to revisit the idea of global health. Despite tens of billions of dollars spent over the past decade under the auspices of global health,¹ a consensus definition for this term remains elusive.^{2–5} Yet the way in which we understand global health critically shapes not only which and whose problems we tackle, but also the way in which we raise and allocate funds,

communicate with the public and policy makers, educate students, and design the global institutions that govern our collective efforts to protect and promote public health worldwide.

The Lancet Global Health

Jan 2014 Volume 2 Number 1 e1 - 57

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

[No relevant content]

The Lancet Infectious Diseases

Jan 2014 Volume 14 Number 1 p1 - 86

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

Editorial

A wake-up call for polio eradication

[The Lancet Infectious Diseases](#)

As of November 26, WHO has confirmed a polio outbreak with a total of 17 cases caused by wild poliovirus type 1 in Syria, which had been polio-free since 1999. The virus seems to be the same strain as that originating from Pakistan and detected in sewers in Egypt in January. In addition to 15 cases that were confirmed in Deir Ez Zur province, eastern Syria, two additional cases have been counted in the rural areas of Damascus, in the southwest, and Aleppo, in the northwest, confirming widespread circulation of the virus.

Since the Syrian conflict broke out in 2011, more than 100 000 people have been killed and Syria's public health system has been devastated. As a result, many people have been left vulnerable to vaccine-preventable illnesses. WHO and UNICEF [estimated that the polio immunisation rate](#) in Syria fell from 91% in 2010 to just 68% in 2012. The numbers suggest that 500 000 children have not been vaccinated against polio in the past 2 years. Furthermore, displacement of people and poor sanitation directly resulting from the conflict increase the risk that these first few cases could herald a widespread outbreak with the potential to set back efforts to eradicate the disease—with consequences reaching far beyond Syria's borders.

As the crisis in Syria has worsened, more and more people are fleeing their homes and seeking asylum in neighbouring countries. One in two Syrians is displaced from their home, the UN says that 2 million are cut off from aid, and almost 3 million refugees have been taken in by Lebanon, Jordan, Iraq, and Turkey as well as Egypt and [Israel](#).

Vaccination of displaced people within Syria and refugees who have left the country is urgently needed to curb transmission of the virus in this vulnerable population and to new groups of people with whom they come into contact. WHO and partners including UNICEF and Rotary International have launched a massive immunisation campaign across Syria and neighbouring countries with the aim of immunising almost 20 million children. The vaccination effort in Syria is particularly difficult because neither the government nor aid agencies have control in some parts of the country, particularly rebel-held areas. Re-engaging health-care workers and re-establishing a cold chain is vital to allow delivery of viable vaccines. Providing access for aid workers to remote areas of the country is of importance as well. Cooperation of the Syrian Government with organisations such as WHO and UNICEF will be essential in rebuilding the health infrastructure.

In a [letter](#) published in The Lancet in November, German scientists Martin Eichner and Stefan Brockmann wrote that the Syrian polio outbreak could represent a real threat to Europe, which has been free from polio for more than 10 years. The virus could easily be transmitted from

Syria by displaced people as easily as it can be transmitted from other countries where the infection is endemic.

At present, polio is endemic in three [countries](#)—Afghanistan, Nigeria, and Pakistan. Until poliovirus transmission is interrupted in these strongholds, all countries remain at risk, as shown not only by the outbreak in Syria, but also in recurrent outbreaks across sub-Saharan Africa, including an ongoing outbreak in Somalia. In southern Afghanistan, where the disease is endemic, the news is good, because no new endemic cases have been reported this year. The major barrier to eradication in Nigeria and Pakistan is access—security fears have prevented health workers from reaching the at-risk populations, and misplaced beliefs about vaccine safety and the motives of vaccine campaigns have led to high rates of vaccine refusal. There is a need for culturally tailored solutions to combat these erroneous suspicions.

The outbreak in Syria could have major health consequences for other countries, and the government there must assist in providing health-care workers and aid organisations with access to at-risk populations. But the outbreak also serves as a reminder that high vaccination coverage is essential in countries where the disease is not currently circulating. Although it seems like a major setback to eradication efforts, the polio outbreak in Syria might be used as an opportunity to reinvigorate eradication campaigns in Afghanistan, Nigeria, Pakistan, and surrounding countries by reminding local political, religious, and community leaders that the persistence of poliovirus transmission there has global repercussions.

Middle East respiratory syndrome coronavirus: quantification of the extent of the epidemic, surveillance biases, and transmissibility

[Simon Cauchemez](#) PhD [a](#), Prof [Christophe Fraser](#) PhD [a](#) [†], [Maria D Van Kerkhove](#) PhD [a](#), Prof [Christl A Donnelly](#) ScD [a](#), [Steven Riley](#) PhD [a](#), Prof [Andrew Rambaut](#) PhD [b](#), [Vincent Enouf](#) PhD [c](#), Prof [Sylvie van der Werf](#) PhD [c](#), Prof [Neil M Ferguson](#) DPhil [a](#)
<http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2813%2970304-9/abstract>

Summary

Background

The novel Middle East respiratory syndrome coronavirus (MERS-CoV) had, as of Aug 8, 2013, caused 111 virologically confirmed or probable human cases of infection worldwide. We analysed epidemiological and genetic data to assess the extent of human infection, the performance of case detection, and the transmission potential of MERS-CoV with and without control measures.

Methods

We assembled a comprehensive database of all confirmed and probable cases from public sources and estimated the incubation period and generation time from case cluster data. Using data of numbers of visitors to the Middle East and their duration of stay, we estimated the number of symptomatic cases in the Middle East. We did independent analyses, looking at the growth in incident clusters, the growth in viral population, the reproduction number of cluster index cases, and cluster sizes to characterise the dynamical properties of the epidemic and the transmission scenario.

Findings

The estimated number of symptomatic cases up to Aug 8, 2013, is 940 (95% CI 290—2200), indicating that at least 62% of human symptomatic cases have not been detected. We find that the case-fatality ratio of primary cases detected via routine surveillance (74%; 95% CI 49—91) is biased upwards because of detection bias; the case-fatality ratio of secondary cases was 20% (7—42). Detection of milder cases (or clinical management) seemed to have improved in recent months. Analysis of human clusters indicated that chains of transmission were not self-sustaining when infection control was implemented, but that R in the absence of controls was in

the range 0·8—1·3. Three independent data sources provide evidence that R cannot be much above 1, with an upper bound of 1·2—1·5.

Interpretation

By showing that a slowly growing epidemic is underway either in human beings or in an animal reservoir, quantification of uncertainty in transmissibility estimates, and provision of the first estimates of the scale of the epidemic and extent of case detection biases, we provide valuable information for more informed risk assessment.

Funding

Medical Research Council, Bill & Melinda Gates Foundation, EU FP7, and National Institute of General Medical Sciences.

Medical Decision Making (MDM)

January 2014; 34 (1)

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

[Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy

December 2013 Volume 91, Issue 4 Pages 659–868

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1468-0009/currentissue](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue)

[No relevant content]

Nature

Volume 505 Number 7481 pp7-126 2 January 2014

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

[No relevant content]

Nature Immunology

January 2014, Volume 15 No 1 pp1-109

<http://www.nature.com/ni/journal/v15/n1/index.html>

Commentary

Universal influenza virus vaccines: need for clinical trials - pp3 - 5

Florian Krammer & Peter Palese

doi:10.1038/ni.2761 <http://www.nature.com/ni/journal/v15/n1/full/ni.2761.html>

To overcome the limitations of seasonal influenza virus vaccines and enhance our pandemic preparedness, influenza virus vaccines that provide universal and long-lasting protection are needed.

Nature Medicine

December 2013, Volume 19 No 12 pp1547-1673

<http://www.nature.com/nm/journal/v19/n12/index.html>

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Nature Reviews Immunology

December 2013 Vol 13 No 12

<http://www.nature.com/nri/journal/v13/n12/index.html>

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New England Journal of Medicine

January 2, 2014 Vol. 370 No. 1

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

[No relevant content]

December 26, 2013 Vol. 369 No. 26

Original Article

Vaccine for Prevention of Mild and Moderate-to-Severe Influenza in Children

Varsha K. Jain, M.D., M.P.H., Luis Rivera, M.D., Khalequ Zaman, M.B., B.S., Ph.D., Roberto A. Espos, Jr., M.D., M.H.S.A., Chukiat Sirivichayakul, M.D., Beatriz P. Quiambao, M.D., Doris M. Rivera-Medina, M.D., Pirunghul Kerdpanich, M.D., Mehmet Ceyhan, M.D., Ener C. Dinleyici, M.D., Alejandro Cravioto, M.D., Ph.D., Mohammed Yunus, M.B., B.S., Pornthep Chanthavanich, M.D., Kriengsak Limkittikul, M.D., Zafer Kurugol, M.D., Ph.D., Emre Alhan, M.D., Adrian Caplanusi, M.D., Ph.D., Serge Durvieux, B.A., Philippe Boutet, D.V.M., Ph.D., Opokua Ofori-Anyinam, Ph.D., Vijayalakshmi Chandrasekaran, M.Sc., Ghassan Dbaibo, M.D., and Bruce L. Innis, M.D.

N Engl J Med 2013; 369:2481-2491 [December 26, 2013](http://www.nejm.org/doi/full/10.1056/NEJMoa1215817) DOI: 10.1056/NEJMoa1215817

<http://www.nejm.org/doi/full/10.1056/NEJMoa1215817>

Abstract

Background

Commonly used trivalent vaccines contain one influenza B virus lineage and may be ineffective against viruses of the other B lineage. We evaluated the efficacy of a candidate inactivated quadrivalent influenza vaccine (QIV) containing both B lineages.

Methods

In this multinational, phase 3, observer-blinded study, we randomly assigned children 3 to 8 years of age, in a 1:1 ratio, to receive the QIV or a hepatitis A vaccine (control). The primary end point was influenza A or B confirmed by real-time polymerase chain reaction (rt-PCR). Secondary end points were rt-PCR–confirmed, moderate-to-severe influenza and rt-PCR–positive, culture-confirmed influenza. The vaccine efficacy and the effect of vaccination on daily activities and utilization of health care resources were assessed in the total vaccinated cohort (2584 children in each group) and the per-protocol cohort (2379 children in the QIV group and 2398 in the control group).

Results

In the total vaccinated cohort, 62 children in the QIV group (2.40%) and 148 in the control group (5.73%) had rt-PCR–confirmed influenza, representing a QIV efficacy of 59.3% (95% confidence interval [CI], 45.2 to 69.7), with efficacy against culture-confirmed influenza of 59.1% (97.5% CI, 41.2 to 71.5). For moderate-to-severe rt-PCR–confirmed influenza, the attack rate was 0.62% (16 cases) in the QIV group and 2.36% (61 cases) in the control group, representing a QIV efficacy of 74.2% (97.5% CI, 51.5 to 86.2). In the per-protocol cohort, the QIV efficacy was 55.4% (95% CI, 39.1 to 67.3), and the efficacy against culture-confirmed influenza 55.9% (97.5% CI, 35.4 to 69.9); the efficacy among children with moderate-to-severe influenza was 73.1% (97.5% CI, 47.1 to 86.3). The QIV was associated with reduced risks of a

body temperature above 39°C and lower respiratory tract illness, as compared with the control vaccine, in the per-protocol cohort (relative risk, 0.29 [95% CI, 0.16 to 0.56] and 0.20 [95% CI, 0.04 to 0.92], respectively). The QIV was immunogenic against all four strains. Serious adverse events occurred in 36 children in the QIV group (1.4%) and in 24 children in the control group (0.9%).

Conclusions

The QIV was efficacious in preventing influenza in children.

(Funded by GlaxoSmithKline Biologicals; ClinicalTrials.gov number, [NCT01218308](#).)

OMICS: A Journal of Integrative Biology

December 2013, 17(12):

<http://online.liebertpub.com/toc/omi/17/12>

[No relevant content]

The Pediatric Infectious Disease Journal

January 2014 - Volume 33 - Issue 1 pp: 1-120,e1-e28

<http://journals.lww.com/pidj/pages/currenttoc.aspx>

[No specific relevant content]

Pediatrics

January 2014, VOLUME 133 / ISSUE 1

<http://pediatrics.aappublications.org/current.shtml>

Monthly Feature

The Challenge of Reducing Neonatal Mortality in Low- and Middle-Income Countries

[Peter A. Cooper](#), FC Paed (SA), PhD

Department of Paediatrics and Child Health, University of the Witwatersrand and Charlotte Maxeke Johannesburg Academic Hospital, Johannesburg, South Africa

<http://pediatrics.aappublications.org/content/133/1/4.extract>

Introductory Commentary

Living beyond the first 28 days of life remains a major accomplishment, particularly in most of southern Asia and sub-Saharan Africa. Dr Cooper presents critical data bringing forward the facts that provide evidence that straightforward and simple medical interventions will help infants get off to a safe and healthy start. Unfortunately, the pace of improvement in the availability of these basic health care services is occurring extremely slowly. Countries that are chronically underresourced have multiple factors contributing to poor neonatal survival rates. Yet, greater progress in improving survival rates could occur with increased attention to providing basic perinatal care. The 2015 Millennium Development Goal for improved child survival will not be achieved in large part due to the inadequate focus given to this critical issue.

—Jay E. Berkelhamer, MD, FAAP

Article

Association Between Pediatric Clinical Trials and Global Burden of Disease

[Florence T. Bourgeois](#), MD, MPH^{a,b}, [Karen L. Olson](#), PhD^{a,b,c}, [John P.A. Ioannidis](#), MD, DSc^{d,e}, and [Kenneth D. Mandl](#), MD, MPH^{a,b,c,f}

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dStanford Prevention Research Center, Department of Medicine, and

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<http://pediatrics.aappublications.org/content/133/1/78.abstract>

Abstract

BACKGROUND: The allocation of research resources should favor conditions responsible for the greatest disease burden. This is particularly important in pediatric populations, which have been underrepresented in clinical research. Our aim was to measure the association between the focus of pediatric clinical trials and burden of disease and to identify neglected clinical domains.

METHODS: We performed a cross-sectional study of clinical trials by using trial records in ClinicalTrials.gov. All trials started in 2006 or after and studying patient-level interventions in pediatric populations were included. Age-specific measures of disease burden were obtained for 21 separate conditions for high-, middle-, and low-income countries. We measured the correlation between number of pediatric clinical trials and disease burden for each condition.

RESULTS: Neuropsychiatric conditions and infectious diseases were the most studied conditions globally in terms of number of trials (874 and 847 trials, respectively), while intentional injuries (5 trials) and maternal conditions (4 trials) were the least studied. Clinical trials were only moderately correlated with global disease burden ($r = 0.58$, $P = .006$). Correlations were also moderate within each of the country income levels, but lowest in low-income countries ($r = .47$, $P = .03$). Globally, the conditions most understudied relative to disease burden were injuries (–260 trials for unintentional injuries and –160 trials for intentional injuries), nutritional deficiencies (–175 trials), and respiratory infections (–171 trials).

CONCLUSIONS: Pediatric clinical trial activity is only moderately associated with pediatric burden of disease, and least associated in low-income countries. The mismatch between clinical trials and disease burden identifies key clinical areas for focus and investment.

Pharmaceutics

Volume 6, Issue 1 (March 2014), Pages 1-

<http://www.mdpi.com/1999-4923/6/1>

[No new relevant content]

Pharmacoeconomics

Volume 31, Issue 12, December 2013

<http://link.springer.com/journal/40273/31/12/page/1>

[Reviewed earlier]

PLoS One

[Accessed 4 January 2014]

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

Research Article

Long-Term Follow-up Observation of the Safety, Immunogenicity, and Effectiveness of Gardasil in Adult Women

Joaquin Luna mail, Manuel Plata, Mauricio Gonzalez, Alfonso Correa, Ivete Maldonado, Claudia Nossa, David Radley, Scott Vuocolo, Richard M. Haupt, Alfred Saah

Published: December 31, 2013

DOI: 10.1371/journal.pone.0083431

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0083431>

Abstract

Background

Previous analyses from a randomized trial in women aged 24–45 have shown the quadrivalent HPV vaccine to be efficacious in the prevention of infection, cervical intraepithelial neoplasia (CIN) and external genital lesions (EGL) related to HPV 6/11/16/18 through 4 years. In this report we present long term follow-up data on the efficacy, safety and immunogenicity of the quadrivalent HPV vaccine in adult women.

Methods

Follow-up data are from a study being conducted in 5 sites in Colombia designed to evaluate the long-term immunogenicity, effectiveness, and safety of the qHPV vaccine in women who were vaccinated at 24 to 45 years of age (in the original vaccine group during the base study [n = 684]) or 29 to 50 years of age (in the original placebo group during the base study [n = 651]). This analysis summarizes data collected as of the year 6 post-vaccination visit relative to day 1 of the base study (median follow-up of 6.26 years) from both the original base study and the Colombian follow-up.

Results

There were no cases of HPV 6/11/16/18-related CIN or EGL during the extended follow-up phase in the per-protocol population. Immunogenicity persists against vaccine-related HPV types, and no evidence of HPV type replacement has been observed. No new serious adverse experiences have been reported.

Conclusions

Vaccination with qHPV vaccine provides generally safe and effective protection from HPV 6- 11- 16- and 18-related genital warts and cervical dysplasia through 6 years following administration to 24–45 year-old women.

Trial Registration

Clinicaltrials.gov [NCT00090220](https://clinicaltrials.gov/ct2/show/study/NCT00090220)

PLoS Medicine

(Accessed 4 January 2014)

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

[No new relevant content]

PLoS Neglected Tropical Diseases

November 2013

<http://www.plosntds.org/article/browseIssue.action>

[No new relevant content]

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

(Accessed 4 January 2014)

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

[No new relevant content]

Pneumonia

Vol 2 (2013)

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

***pneumonia** is an international, peer reviewed open access journal that publishes original research articles, case studies, reviews, commentaries, correspondence and highlights, news and activities on all aspects related to pneumonia. The focus of the journal is to establish an international forum for pneumonia, bringing together knowledge from the various specialties involved in the treatment and prevention of this disease*

[Reviewed earlier]

Public Health Ethics

Volume 6 Issue 3 November 2013

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

[Reviewed earlier]

Qualitative Health Research

December 2013; 23 (12)

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

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

October 2013 Vol. 34, No. 4

http://www.paho.org/journal/index.php?option=com_content&view=article&id=133&Itemid=229&lang=en

[Reviewed earlier; No relevant content]

Risk Analysis

December 2013 Volume 33, Issue 12 Pages 2079–2224

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2013.33.issue-12/issuetoc>

[Reviewed earlier]

Science

3 January 2014 vol 343, issue 6166, pages 1-108

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

[No relevant content]

Science Translational Medicine

1 January 2014 vol 6, issue 217

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

[No relevant content]

Social Science & Medicine

Volume 102, [In Progress](#) (February 2014)

<http://www.sciencedirect.com/science/journal/02779536/102>

[No new relevant content]

UN Chronicle

Vol. L No. 4 2013 December 2013

<http://unchronicle.un.org/>

Theme: [Education](#)

This edition of the UN Chronicle looks at the social impact of education as part of the third anniversary of the establishment of the United Nations Academic Impact. The articles, written by leading experts on education, examine issues such as the importance of educating young people about the UN; higher learning institutions and global citizen education; making academic research accessible; international mobility of Brazilian students; and education as the pathway towards gender equality.

Vaccine

<http://www.sciencedirect.com/science/journal/0264410X/32>

Volume 32, Issue 5, Pages 527-638 (23 January 2014)

[Tetanus, diphtheria and acellular pertussis \(Tdap\) vaccination among healthcare personnel—United States, 2011](#)

Original Research Article

Pages 572-578

Peng-jun Lu, Samuel B. Graitcer, Alissa O'Halloran, Jennifer L. Liang

Abstract

Background

Health-care personnel (HCP) are at risk for exposure to and possible transmission of vaccine-preventable diseases. Receiving recommended vaccines is an essential prevention practice for HCP to protect themselves and their patients. The tetanus, diphtheria and acellular pertussis vaccine (Tdap) was recommended by the Advisory Committee on Immunization Practices (ACIP) for HCP in 2006 for protection against pertussis. We assessed the recent compliance of U.S. HCP in receiving Tdap vaccination.

Methods

To estimate Tdap vaccination coverage among HCP, we analyzed data from the 2011 National Health Interview Survey (NHIS). Multivariable logistic regression and predictive marginal models were performed to identify factors independently associated with vaccination among HCP.

Results

Overall, Tdap vaccination coverage was 26.9% among HCP aged 18–64 years (95% confidence interval (CI) = 24.3%, 29.7%), which was significantly higher compared with non-HCP among the same age group (11.1%; 10.5–11.8%). Overall, vaccination coverage was significantly higher among physicians (41.5%) compared with nurses (36.5%) and other types of HCP (range 11.7–29.9%). Vaccination coverage was significantly higher among HCP aged 18–49 years compared with those 50–64 years (30.0% vs. 19.2%, respectively). Characteristics independently associated with an increased likelihood of Tdap vaccination among HCP were: younger age, higher education, living in the western United States, being hospitalized within past year, having a place for routine health care in clinic or health center, and receipt of influenza vaccination in the previous year. Marital status of widowed, divorced, or separated was independently associated with a decreased likelihood of Tdap vaccination among HCP.

Conclusions

By 2011, Tdap vaccination coverage was only 26.9% among HCP. Vaccination coverage varied widely by types of HCP and demographic characteristics. Emphasizing the benefits of HCP vaccination for staff and patients, providing vaccinations in the workplace and other non-traditional settings, and providing Tdap at no charge may help increase Tdap vaccination among HCP in all health-care settings.

Parent and provider perspectives on immunization: Are providers overestimating parental concerns?

Original Research Article

Pages 579-584

C. Mary Healy, Diana P. Montesinos, Amy B. Middleman

Abstract

Objectives

Data are limited on whether providers understand parental attitudes to recommended childhood immunizations. We determined parental attitudes and assessed how accurately providers estimated parental opinions.

Methods

Survey of parents and providers (pediatricians, nurses, medical assistants) in randomly selected practices in Houston, Texas. Surveys assessed demographics, perceptions of immunization importance, safety and efficacy, and acceptability of vaccine delivery. Providers estimated parental responses.

Results

401 parents (82% mothers, 12% fathers, 6% other) and 105 providers participated. Parents thought vaccines were important for health (median score 9.5; 0 = not important, 10 = extremely important) but also were concerned regarding vaccine safety and side effects (8.9 on 0–10 scale). 309 (77%) agreed that vaccines effectively prevent disease. Route of administration mattered to 147 (37%), who preferred injection (9.0) over oral (7.3) or intranasal (4.8) routes. Although parents would prefer three or fewer injections per visit, preventing more diseases (189 [47.6%]) was more important than number of injections (167 [42.3%]) when deciding the number of vaccines allowed per visit. White parents rated vaccines less important in preventing some illnesses than did non-white ($P \leq 0.006$ for meningitis, hepatitis, HPV, influenza and rotavirus) and rated number of injections per visit more important than number of diseases prevented (51.6% white versus 34.2% non-white; $P 0.002$). Providers underestimated parental attitudes toward vaccine importance (particularly influenza and HPV), and overestimated the proportion of parents who thought route of administration mattered (63%) and that number of injections per visit was the most important factor (76%) around parental vaccine decisions ($P < 0.001$ for parent–provider mismatch).

Conclusions

Most surveyed parents believe vaccines are important for child health and rate disease prevention higher than number of injections entailed. Providers underestimate the importance of some vaccines to parents and overestimate parental concerns regarding route of administration. Future research should focus on how this mismatch impacts parental vaccine decisions.

Examining the views of key stakeholders regarding the provision of occupational influenza vaccination for healthcare workers in Australia

Original Research Article

Pages 606-610

Yi Chen Lim, Holly Seale

Abstract

Annual vaccination of hospital healthcare workers (HCWs) may be an effective measure to reduce the transmission of healthcare associated influenza. However, vaccine coverage rates among HCWs in most public Australian hospitals are below satisfactory for a number of reasons. This study aimed to examine the opinions of key health stakeholders on current issues regarding HCW influenza vaccination.

A qualitative study involving semi-structured interviews was undertaken with key Australian health stakeholders representing different organizations and sectors involved in influenza vaccination and policy. Amongst the participants, there was overwhelming support for HCW influenza vaccination. They viewed vaccination as one of the most important preventive measures for healthcare associated influenza and generally agreed that vaccination of HCWs reduces the overall risk of transmission to patients. However, there were contradictory attitudes regarding the evidence available for justifying the impact of vaccinating HCWs against influenza. Amongst the stakeholders interviewed, there was support for continuing to promote influenza vaccination for HCWs via the conventional framework. Participants recommended that hospitals continue to use conventional, voluntary strategies to increase vaccine coverage such as education and mobile carts. Given that the World Health Organization has included HCWs as a target group for influenza vaccination, Australian hospitals may need to start considering the use of mandatory policies in the near future.

Vaccination benefits and cost-sharing policy for non-institutionalized adult Medicaid enrollees in the United States

Original Research Article

Pages 618-623

Alexandra M. Stewart, Megan C. Lindley, Kristen H.M. Chang, Marisa A. Cox

Abstract

Medicaid is the largest funding source of health services for the poorest people in the United States. Medicaid enrollees have greater health care, needs, and higher health risks than other individuals in the country and, experience disproportionately low rates of preventive care. Without, Medicaid coverage, poor uninsured adults may not be vaccinated or would, rely on publicly-funded programs that provide vaccinations. We examined each programs' policies related to benefit coverage and, copayments for adult enrollees. Our study was completed between October 2011 and September 2012 using a document review and a survey of Medicaid administrators that assessed coverage and cost-sharing policy for fee-for-service programs. Results were compared to a similar review, conducted in 2003. Over the past 10 years, Medicaid programs have typically maintained or expanded vaccination coverage benefits for adults and nearly half have explicitly prohibited copayments. The 17 programs that cover all recommended vaccines while prohibiting, copayments demonstrate a commitment to providing

increased access to vaccinations for adult enrollees. When developing responses to fiscal and political challenges, the programs that do not cover all ACIP recommended adult vaccines or those that permit copayments for vaccinations, should consider all strategies to increase vaccinations and reduce costs to enrollees.

Vaccine

Volume 32, Issue 4, Pages 433-526 (16 January 2014)

<http://www.sciencedirect.com/science/journal/0264410X/32/4>

Improvement in attitudes toward influenza vaccination in medical students following an integrated curricular intervention

Original Research Article

Pages 502-506

Nelia Afonso, Maurice Kavanagh, Stephanie Swanberg

Abstract

Introduction

Vaccination of health care workers (HCW) reduces transmission of influenza among patients, yet uptake of vaccination remains low. If vaccination education is integrated into the early medical school curriculum, will student attitudes toward the vaccine change? The objectives of the study were to: (1) Determine influenza vaccination rates among entering medical students; (2) Assess the attitudes toward influenza vaccination; (3) Evaluate the effects of a multifaceted educational intervention on attitudes to vaccination.

Methods

Entering medical students were surveyed before and after an intervention at the beginning of the influenza season. This intervention provided by an inter-professional team, included education about influenza, importance of vaccination for HCWs, followed by vaccination administration practice, and ended with students vaccinating consenting classmates.

Results

The pre-intervention surveys and intervention were completed by 124 of 125 (99%) students. Pre-intervention survey revealed 60 (48%) of students had been previously vaccinated. Of the vaccinated students 91% had been recommended vaccination by their healthcare provider compared to 43% of non-vaccinated students. More positive attitudes were noted in the vaccinated students compared to non-vaccinated students: importance of vaccination ($p < 0.01$); HCWs should be vaccinated ($p < 0.01$); recommendation of vaccine to family and friends ($p < 0.01$). 97 (78%) students completed post-intervention surveys. Significant improvement in these attitudes was noted post-intervention compared to pre-intervention: importance of vaccination 93% versus 71% ($p < 0.01$); HCWs should be vaccinated 95% versus 83% ($p < 0.01$); recommendation to family and friends 93% versus 73% ($p < 0.01$); comfort with vaccine counseling 92% versus 41%; comfort with vaccine administration 84% versus 22% ($p < 0.01$).

Conclusion

Educating medical students and promoting the importance of vaccination early in a medical student's career using such an intervention is relatively simple and easily integrated into the curriculum. This intervention was successful in vaccinating all students, and demonstrated a marked positive shift in attitudes toward influenza vaccination.

Vaccine

Volume 32, Issue 3, Pages 311-432 (9 January 2014)

<http://www.sciencedirect.com/science/journal/0264410X/32/3>

Literature review of HPV vaccine delivery strategies: Considerations for school- and non-school based immunization program

Review Article

Pages 320-326

Proma Paul, Anthony Fabio

Abstract

School-based vaccination is becoming a more widely considered method of delivering HPV immunizations to an adolescent population; however, many countries do not have experience with delivering adolescent vaccines or school-based programs. This literature review will summarize the experiences from countries implementing non-health facility-based and health facility-based vaccination programs and assess HPV vaccine coverage. In October 2012, a systematic search in PubMed for studies related to the evaluation of national/regional, pilot, or demonstration HPV immunization programs that worked within existing health system yielded nine articles, representing seventeen countries. School-based programs achieved high HPV vaccination coverage rates in 9 to 13-year-old girls across the different studies and geographic locations, suggesting non-health facility-based programs are possible for HPV vaccine introduction. Grade-based, compared to age-based, eligibility criteria may be easier to implement in school settings. More studies are needed to explore the methods to standardize estimates for HPV vaccine coverage so that programs can be appropriately evaluate

Parental and community acceptance of the benefits and risks associated with meningococcal B vaccines

Original Research Article

Pages 338-344

Helen Marshall, Michelle Clarke, Thomas Sullivan

Abstract

Objective

A new meningococcal serogroup B (Men B) vaccine has been licensed in the European Union (EU) and Australia. This study aimed to assess community and parental attitudes to introduction of new Men B vaccines and identify facilitators and barriers to vaccine implementation.

Methods

Cross-sectional survey including face-to-face interviews with adolescents, parents and adults from randomly selected households in South Australia in 2012. Survey data were weighted to the age, gender and geographical area profile of the population.

Results

3055 interviews were conducted with individuals aged 15–97 years, including 966 parents. Participation rate was 66.4%. 82.5% (95% CI 79.7–85.4) of parents (797/966) wanted their child to receive the Men B vaccine, with 12.2% (9.7–14.7) (118/966) unsure. Main parental concerns included potential side effects (41.3% (26.7–46.0)) and adequate vaccine testing (11.7% (9.4–14.1)). Potential for an extra injection at an immunisation visit resulted in 15.7% (12.8–18.5) of parents (n = 152/966) less likely to have their child immunised. Potential redness/swelling at the injection site or mild/moderate fever resulted in only 8.5% (6.3–10.7) and 10.8% (8.5–13.2) of parents, respectively, less likely to have their child immunised. Children being up to date with vaccinations and recommendation from family physician were the strongest independent predictors of parents agreeing their children should be immunised with Men B vaccine (OR = 6.58; p = 0.006 and OR = 4.15; p < 0.001, respectively). Only 16.4% (14.9–17.9) of adults (501/3055) stated that they would not want to receive a Men B vaccine, with family physician recommendation the strongest independent predictor of acceptance (OR = 3.81; p < 0.001).

Conclusions

There is strong community support for introduction of Men B vaccines, with parental willingness to have children immunised, impacted more by number of injections than potential for adverse events such as local reactions or fever.

Cervical cancer and HPV: Awareness and vaccine acceptability among parents in Morocco

Original Research Article

Pages 409-416

Mustapha Mouallif, Harriet L. Bowyer, Soukaina Festali, Adelin Albert, Younes Filali-Zegzouti, Samuel Guenin, Philippe Delvenne, Jo Waller, Moulay Mustapha Ennaji

Abstract

Cervical cancer is a major public health concern in Morocco where it represents the second most common and lethal cancer in women. Human papillomavirus (HPV) vaccines have been licensed in Morocco since 2008 but there are no available data on their acceptability. This study aimed to assess awareness of HPV and the vaccine, and to identify factors associated with acceptability of the vaccine among parents in Morocco.

We carried out a questionnaire-based survey using face-to-face interviews in a sample of 852 parents (670 mothers and 182 fathers) with at least one unmarried daughter ≤ 26 years. We collected data within public and private health centres and clinics in four regions in Morocco between July and August 2012. The main outcome measure was parental acceptability of the HPV vaccine for their daughter(s).

Responses revealed very low awareness of HPV infection (4.7%) and the HPV vaccine (14.3%). None of the participants had vaccinated their daughter(s) against HPV and vaccine acceptability was low among mothers (32%) and fathers (45%). Higher education and income, previous awareness of the HPV vaccine and endorsement of the belief that a recommendation from the Ministry of Health or a doctor to have the vaccine would be encouraging, were associated with mothers' HPV vaccine acceptability. Non-acceptability among mothers was associated with having more than two daughters, believing the vaccine was expensive, lack of information and believing that whatever happens to an individual's health is God's will. The only factor associated with the fathers' acceptability of the vaccine was the cost of the vaccine. Increasing HPV and HPV vaccine awareness through educational campaigns, along with active recommendation by physicians and a publically funded vaccination programme could increase parental acceptability of the HPV vaccine in Morocco

Vaccine: Development and Therapy

(Accessed 4 January 2014)

<http://www.dovepress.com/vaccine-development-and-therapy-journal>

[No new relevant content]

Vaccines — Open Access Journal

(Accessed 4 January 2014)

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

Vaccines (ISSN 2076-393X), an international open access journal, is published by MDPI online quarterly.

[No new relevant content]

Value in Health

Vol 16 | No. 8 | December 2013 | Pages 1111-1174

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

[No relevant content]

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

[Reports to the Vaccine Adverse Event Reporting System after hepatitis A and hepatitis AB vaccines in pregnant women](#)

PL Moro, OI Museru, M Niu, P Lewis, K Broder - American Journal of Obstetrics and ..., 2013
Objective To characterize adverse events (AEs) after Hepatitis A vaccines (Hep A) and Hepatitis A and Hepatitis B combination vaccine (Hep AB) in pregnant women reported to the Vaccine Adverse Event Reporting System (VAERS), a spontaneous reporting ...

[Long-term follow-up of study participants from prophylactic HIV vaccine clinical trials in Africa](#)

C Schmidt, W Jaoko, G Omosa-Manyonyi, P Kaleebu... - Human Vaccines & ..., 2013
Abstract Long-term safety is critical for the development and later use of a vaccine to prevent HIV/AIDS. Likewise, the persistence of vaccine-induced antibodies and their impact on HIV testing must be established. IAVI has sponsored several Phase I and IIA HIV vaccine trials ...

[Community Circulation Patterns of Oral Polio Vaccine Serotypes 1, 2, and 3 after Mexican National Immunization Weeks](#)

S Troy, L Ferreyra-Reyes, CH Huang, C Sarnquist... - Journal of Infectious ..., 2013
Background. With wild poliovirus nearing eradication, preventing circulating vaccine-derived poliovirus (cVDPV) by understanding OPV community circulation is increasingly important. Mexico, where OPV is given only during biannual national immunization weeks (NIWs) but ...

[Consequences of incomplete measles vaccine uptake in healthcare workers during an outbreak in North East England](#)

P Bogowicz, J Waller, D Wilson, K Foster - Journal of Hospital Infection, 2013
Summary Two cases of measles-infected healthcare workers are described, plus the case of a third who was excluded from work for an extended period of time due to non-immunity, during an outbreak in North East England. There is clearly a need for further effort to ...

[Current Dengue Vaccine Status](#)

L Lin, SJ Thomas - Current Tropical Medicine Reports, 2013
Abstract As the impact of dengue expands, a safe and effective vaccine will benefit the world greatly. Recent progress and novel approaches have advanced the field, but many challenges and unanswered questions remain for dengue vaccine developers. The most advanced ...

[Systematic review of the indirect effect of pneumococcal conjugate vaccine dosing schedules on pneumococcal disease and colonization.](#)

JD Loo, L Conklin, KE Fleming-Dutra, MD Knoll... - The Pediatric infectious ..., 2014

BACKGROUND: To aid decision making for pneumococcal conjugate vaccine (PCV) use in infant national immunization programs, we summarized the indirect effects of PCV on clinical outcomes among nontargeted age groups. METHODS: We systematically reviewed the ...

[Systematic Review of the Effect of Pneumococcal Conjugate Vaccine Dosing Schedules on Vaccine-type Invasive Pneumococcal Disease Among Young Children.](#)

L Conklin, JD Loo, J Kirk, KE Fleming-Dutra... - The Pediatric infectious ..., 2014

BACKGROUND: Pneumococcal conjugate vaccines (PCV) are being implemented globally using a variety of different schedules. The optimal schedule to maximize protection of vaccinated children against vaccine-type invasive pneumococcal disease (VT-IPD) is not ...

[Dosing schedules for pneumococcal conjugate vaccine: considerations for policy makers.](#)

CG Whitney, D Goldblatt, KL O'Brien - The Pediatric infectious disease journal, 2014

Since second generation pneumococcal conjugate vaccines (PCVs) targeting 10 and 13 serotypes became available in 2010, the number of national policy makers considering these vaccines has steadily increased. An important consideration for a national ...

[Systematic Review of the Effect of Pneumococcal Conjugate Vaccine Dosing Schedules on Vaccine-type Nasopharyngeal Carriage.](#)

KE Fleming-Dutra, L Conklin, JD Loo, MD Knoll... - The Pediatric infectious ..., 2014

BACKGROUND: Pneumococcal conjugate vaccines (PCV) reduce nasopharyngeal carriage of vaccine type (VT) pneumococci, an important driver of vaccine programs' overall benefits. The dosing schedule that best reduces carriage is unclear. METHODS: We performed a ...

[Systematic review of the effect of pneumococcal conjugate vaccine dosing schedules on prevention of pneumonia.](#)

JD Loo, L Conklin, KE Fleming-Dutra, KM Deloria... - The Pediatric infectious ..., 2014

BACKGROUND: Pneumonia is the leading cause of morbidity and mortality among children < 5 years of age globally. Pneumococcal conjugate vaccines (PCVs) are known to provide protection against vaccine serotype pneumococcal pneumonia; uncertainty exists ...

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 4 January 2014

[No new, unique, relevant content]

The Atlantic

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

Accessed 4 January 2014

[No new, unique, relevant content]

BBC

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

Accessed 4 January 2014

[No new, unique, relevant content]

Brookings

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

Accessed 4 January 2014

[No new, unique, relevant content]

Council on Foreign Relations

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

Accessed 4 January 2014

[No new, unique, relevant content]

Economist

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

Accessed 4 January 2014

The new drug war

Hard pills to swallow

Drug firms have new medicines and patients are desperate for them. But the arguments over cost are growing

Jan 4th 2014 | NAIROBI AND NEW YORK

Excerpt

A new drug war is looming. The market is growing: patients in rich countries are ageing and those in developing ones are getting richer and suffering from chronic diseases. But as demand for drugs rises, so does concern at their price. A record \$1 trillion will be spent globally on medicines in 2014, predicts IMS Health, a research firm. "The costs of many new medical products are becoming unsustainable for even the wealthiest countries in the world," said Margaret Chan, the head of the World Health Organisation (WHO), in August...

<http://www.economist.com/news/international/21592655-drug-firms-have-new-medicines-and-patients-are-desperate-them-arguments-over>

Financial Times

<http://www.ft.com>

Accessed 4 January 2014

[No new, unique, relevant content]

Forbes

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

Accessed 4 January 2014

[No new, unique, relevant content]

Foreign Affairs

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

Accessed 4 January 2014

[No new, unique, relevant content]

Foreign Policy

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

Accessed 4 January 2014

[No new, unique, relevant content]

The Guardian

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

Accessed 4 January 2014

[No new, unique, relevant content]

The Huffington Post

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

Accessed 4 January 2014

[The Huffington Post](#) | 2 January 2014

How Nigeria Is Helping Stop Polio for Good

Tom Frieden, Director, Centers for Disease Control and Prevention (CDC)

There are three places in the world where wild poliovirus has never stopped killing and disabling children: Afghanistan, Pakistan, and Nigeria...

Le Monde

<http://www.lemonde.fr/>

Accessed 4 January 2014

[No new, unique, relevant content]

New Yorker

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

Accessed 4 January 2014

[No new, unique, relevant content]

New York Times

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

Accessed 4 January 2014

Op-Ed Contributors

Syria's Raging Health Crisis

By ADAM P. COUTTS and FOUAD M. FOUAD

Published: January 1, 2014

http://www.nytimes.com/2014/01/02/opinion/syrias-raging-health-crisis.html?_r=1&

BEIRUT, Lebanon — The public health disaster in Syria has been a long time coming. In three years of violent conflict, 125,000 have been killed and millions displaced. The recent outbreak

of polio has focused the world's attention, and the international response is welcome. Yet this crisis was both predictable and preventable.

The collapse of the health system and a lack of basic sanitation in opposition-held areas have created prime conditions for outbreaks of vaccine-preventable diseases. Syria eradicated polio 14 years ago; the fact that it has returned represents more than a breakdown of health care during civil war. It is symptomatic of how the international community, in its response to the crisis, has neglected public health.

Immunization coverage in what are now mainly opposition areas was already below accepted standards in 2011, but the situation has deteriorated. Data on routine immunization from the World Health Organization reveal that over the past two years a large proportion of the Syrian population has gone without vaccination.

Across Syria, coverage went down to 60 percent in 2012, and was as low as 50 percent in the embattled eastern city of Deir al-Zour, a front line between government and rebel forces. The latest W.H.O. figures from 2013 show that the level is now down to 36 percent in largely rebel-held Deir al-Zour Province, although it has remained at 100 percent in government-controlled areas such as the western stronghold of Tartus.

Given these conditions, it was no surprise to medical practitioners that a polio outbreak occurred. The question is why the international community did not prepare better for this eventuality. A disturbing part of the answer is that the United Nations itself has aggravated the situation.

Like other United Nations agencies, the World Health Organization works directly with the Syrian government. The W.H.O.'s Syria office is in the Ministry of Health building in Damascus; many of its staff members are former ministry employees. A recent Reuters report on how the Assad government uses red tape and threats to prevent the provision of aid in opposition areas has raised doubts about the ability of the W.H.O. to act with impartiality.

The W.H.O., working with the Syrian government, excluded Deir al-Zour from a polio vaccination drive that began in December 2012. According to the W.H.O., the province "was not included in the campaign as the majority of its residents have relocated to other areas in the country." Ten months later, this was the province where polio re-emerged.

There is no evidence that most of the province's one million residents had, in fact, migrated. The United Nations World Food Program continued to distribute food there throughout 2012 and 2013 (with occasional interruptions because of worsening security conditions). In December 2012, the agency reached 69,000 people in Deir al-Zour.

Last month, an investigation by the German weekly newsmagazine *Der Spiegel* charged the W.H.O. with obstructing the testing of polio samples from the Deir al-Zour region. These samples had been presented by an agency working under the aegis of the Syrian National Coalition. It took nearly a month to get the test results — positive for poliomyelitis — and then only from an independent provider in Turkey. By that time, thousands of displaced people had moved within Syria or fled as refugees to neighboring countries, most likely spreading the disease.

The latest draft of a W.H.O. situation report for Syria reveals that it took three months for the W.H.O. and the Syrian Health Ministry to confirm a polio case detected in Aleppo in July 2013. It was then some weeks before a nationwide vaccination campaign began.

The consequences of these delays and failures now reach well beyond Syria's borders. Lebanon and Jordan, where a large proportion of Syrian refugees have fled, are particularly at risk. Their public health systems are already overloaded and underfunded. Unicef figures for immunization from the Lebanese Health Ministry indicate that only 77 percent of the population had been routinely covered for polio in recent years, placing thousands of Lebanese children at

risk. "If the Unicef figures are correct, then this would be far too low to keep an introduced infection at bay," said Professor Martin Eichner, a disease expert at the University of Tübingen, Germany. "With 4,000 Syrian refugees a day leaving the country, and the majority entering Lebanon, the virus is already in Lebanon or they will get it sometime soon."

There is also no discernible plan for delivering vaccination coverage to the hundreds of tented settlements that house as many as 200,000 Syrian refugees across Lebanon.

The emergency is not limited to polio. While Syria's polio outbreak has been making headlines, other communicable diseases like hepatitis A, the parasitic infection leishmaniasis, typhoid and measles have all been rising. Chronic and noncommunicable diseases such as diabetes, hypertension and cancer have also been silently killing Syrians by the tens of thousands. We know from previous crises that up to 80 percent of excess deaths are attributable to wider health conditions during and after a conflict.

The situation is extremely challenging, but humanitarian agencies in the region should be independent and transparent. There are very real challenges for United Nations staff members working in Syria, but the World Health Organization must respond to the claims that it refused to test the Deir al-Zour polio samples, explain why it took three months to confirm a suspected case in July 2013 and give a better account of why the area was excluded from its vaccination drive.

Anything short of this disclosure risks causing more preventable deaths, not just in Syria but across the entire region.

Adam P. Coutts is a researcher at the London School of Hygiene and Tropical Medicine. Fouad M. Fouad, a Syrian doctor, is an assistant research professor in the faculty of health sciences at the American University of Beirut.

Reuters

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

Accessed 4 January 2014

[No new, unique, relevant content]

Wall Street Journal

<http://online.wsj.com/home-page>

Accessed 4 January 2014

[No new, unique, relevant content]

Washington Post

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

Accessed 4 January 2014

[No new, unique, relevant content]

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