Center for Vaccine Ethics and Policy
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Vaccines: The Week in Review
9 February 2013
Center for Vaccine Ethics & Policy (CVEP)

This weekly summary targets news, events, announcements, articles and research in the global vaccine 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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Editor's Notes:

- A pdf version of this issue is available on our blog: http://centerforvaccineethicsandpolicy.wordpress.com/

Nigerian polio vaccinators shot dead in Kano

BBC: 8 February 2013

Extract

"Nine female polio vaccinators have been killed in two shootings at health centres in northern Nigeria, police have told the BBC.

In the first attack in Kano the polio vaccinators were shot dead by gunmen who drove up on a motor tricycle.

Thirty minutes later gunmen targeted a clinic outside Kano city as the vaccinators prepared to start work…

…On Thursday, a controversial Islamic cleric spoke out against the polio vaccination campaign, telling people that new cases of polio were caused by contaminated medicine. Such opposition is a major reason why Nigeria is one of just three countries where polio is still endemic.

But this is believed to be the first time polio vaccinators have been attacked in the country...

…A health official confirmed to the BBC that those killed in the second attack in Hotoro were female health workers - there were earlier reports that people waiting at the clinic may have been among those shot.

Witnesses in Hotoro told the BBC gunmen also approached the health centre using a motor tricycle…"

http://www.bbc.co.uk/news/world-africa-21381773

Joint WHO/UNICEF Statement: *UNICEF and WHO condemn attacks on healthworkers in Nigeria*

UNICEF and The World Health Organization (WHO) join the Government of Nigeria in condemning attacks in Kano state, Nigeria, that have killed and injured healthworkers.

Such attacks are a double tragedy; for the health workers and their families and for the children and vulnerable populations who are robbed of basic life-saving health interventions. These attacks are unacceptable under any circumstance.

WHO and UNICEF extend their deepest sympathy to the families of the healthworkers. We remain committed to supporting the Government of Nigeria and the people of Nigeria in their efforts to better the health and lives of its people.

8 February 2013

http://www.who.int/mediacentre/news/statements/2013/polio_worker_killings_20130208/en/index.html

Update: Polio this week - *As of 06 February 2013*

Global Polio Eradication Initiative

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

[Editor's Extract and bolded text]

- The first WPV case of 2013 was reported this week, a WPV1 from greater Karachi, Pakistan. The 14-month old child had onset of paralysis on 14 January 2013. Case response activities are being planned.
- Response activities are also ongoing in both Niger and Egypt, in response to recent detection of a case (in Niger) and environmental isolates (in Egypt).

Pakistan

- One new WPV case was reported in the past week (WPV1 from Sindh, with onset of paralysis on 14 January 2013). It is the first WPV case of 2013. The total number of WPV cases for 2012 remains 58.
- One new cVDPV2 case was reported in the past week, bringing the total number of cVDPV2 cases for 2012 to 16. It is the most recent cVDPV2 case in the country, and had onset of paralysis on 14 December 2012 (from Balochistan).
- The security situation continues to be monitored closely, in consultation with law enforcement agencies.

Families of slain polio workers receive cheques – Karachi, Pakistan

M. Waqar Bhatti, The News International

Thursday, February 07, 2013 Print Edition

Extract

"The families of the polio workers, who were murdered in Karachi in December, each received a cheque of Rs200,000 *(about USD$2,000)* from the provincial government on Wednesday.

Speaking at the hotel where the cheques were distributed, Sindh Health Minister Dr Sagheer Ahmed declared the slain polio workers martyrs, as they had "sacrificed their lives to protect children from the crippling disease".

"Money cannot compensate for the loss of lives, but this meagre amount will help solve some of the monetary problems faced by the polio workers' families," he added.

"Earlier such incidents used to happen only in Khyber Pakhtunkhwa, but now terrorist activities are also taking place in Karachi which is alarming. Anti-social elements don't want the well-being of the future Pakistani generations."

The minister said all eminent Ulema in the country had issued Fatwas in favour of polio vaccination, but the ignorant terrorists were still opposing it and wanted to spread chaos in the country.

"Polio vaccination will be carried on despite threats and violence. Children will not be allowed to get crippled due to polio."

Fateha and prayers were offered for the murdered vaccinators. The event was organised by the Rotary International…."

http://www.thenews.com.pk/Todays-News-4-158497-Families-of-slain-polio-workers-receive-cheques

GAVI confirmed that Ghana, Kenya, Lao PDR, Madagascar, Malawi, Niger, Sierra Leone and Tanzania "will become the first countries to receive GAVI support to start HPV vaccine demonstration programmes." GAVI said the demonstration programmes "will give each country the opportunity to test their ability to put in place the systems that would be needed to roll out the HPV vaccines nationally and to inform their decisions." Dr. Seth Berkley, GAVI CEO, said, "Introducing the HPV vaccine in developing countries is the start of a global effort to protect all girls against cervical cancer. Of the 275,000 women who die of cervical cancer annually, 85% live in the world's poorest countries. Cervical cancer is one of the leading cancer killers of women in the developing world." UNICEF will procure the vaccines following a competitive tender process that is currently being completed. Merck and GlaxoSmithKline (GSK) are currently the only two manufacturers who have prequalified HPV vaccines. GAVI noted that it has been "working with vaccine manufacturers to secure the most affordable price for HPV vaccines. To date, one manufacturer has announced an indicative price of US$ 5 per dose, a 64% reduction on the current lowest public price. GAVI expects to secure a lower price for procurement of HPV vaccines, vital to the sustainability of current and future programmes." The GAVI announcement described one of the challenges to effectively delivering HPV vaccines is that "many developing countries do not offer routine health services for girls in the 9 to 13 age group. Other challenges include identifying the appropriate target group, engaging with those at highest risk who may not be easily reached, and preventing a sexually transmitted cancer-causing infection that is minimally symptomatic or asymptomatic."
http://www.gavialliance.org/library/news/press-releases/2013/gavi-funds-vaccines-to-protect-girls-against-cervical-cancer/

PAHO/WHO launched the "Women's Cancer Initiative: A joint commitment to save lives" described as a new initiative which "brings together partners from different sectors to step up action for the prevention and control of cervical and breast cancer, the leading women's cancers in Latin America and the Caribbean." The effort will include "joint efforts in areas including advocacy and communication; capacity building for detection, diagnosis, treatment and care in health services; improved access to services and treatment; wider vaccination against human papillomavirus (HPV); and expanded research." PAHO said that the Women's Cancer Initiative is being organized by the Pan American Forum of Action on the Non-

communicable Diseases (PAFNCDs), which brings together representatives of governments, academia, civil society, and the private sector to fight the growing epidemic of non-communicable diseases in the Americas. Members include ministries of health from throughout the Americas as well as the National Cancer Institutes Network (RINC/UNASUR), the International Agency for Cancer Research (IARC), the American Cancer Society, the American Society of Clinical Oncology (ASCO), Basic Health International, the Canadian Partnership against Cancer, Grounds for Health, the Fred Hutchinson Cancer Research Center, the CIMAB Foundation, and the Global Task Force for Cancer Control in Developing Countries of the Harvard Global Equity Initiative. Other participants include the Healthy Caribbean Coalition, FEMAMA, the Albert & Mary Lasker Foundation, LIVESTRONG Foundation, the International Union for Cancer Control, NIH Foundation, JHPIEGO, the Pan American Health and Education Foundation, PATH, Susan G. Komen for the Cure, Becton Dickinson & Co., Merck, Pfizer, Policy Wisdom, Qiagen, Roche, phRMA, Spectrum, and GSK.
http://new.paho.org/hq/index.php?option=com_content&view=article&id=8257&Itemid=

The **Weekly Epidemiological Record (WER) for 8 February 2013**, vol. 88, 6 (pp. 65–72) includes:
- Global Advisory Committee on Vaccine Safety, December 2012
http://www.who.int/entity/wer/2013/wer8806.pdf

WHO - Vaccines prequalification priority list 2013-14
Priorities for vaccine evaluations for prequalification for 2013-2014
http://www.who.int/immunization_standards/vaccine_quality/pq_priorities/en/index.html
Editor's Extract

"The prioritization list below is a tool published every two years by the WHO prequalification programme to guide decisions as to the vaccines on which to focus resources. Vaccines are categorized in four groups: high, medium, low and no priority. At each deadline for application submission, WHO will accept for evaluation vaccine applications in any of the first three groups as long as the resources are sufficient to evaluate them. If the number of applications exceeds the capacity at WHO, vaccines will be taken up for evaluation according to the assigned priority. Evaluation of applications for vaccines in the lowest priority group may be postponed to the subsequent deadline. Applicants will be informed accordingly. Within the same category, applications will be considered for evaluation in order of receipt . A vaccine given no priority will not be accepted for evaluation during the period the list is in force….

"The priority list was developed by consultation between WHO and the two United Nations purchasing agencies (UNICEF and the Pan American Health Organization Revolving Fund) which use the prequalification service for vaccines…

Criteria used for decision-making

a) Demand in the respective UN-supplied markets, with consideration given to plans for introduction;
b) WHO programmatic needs (e.g. to comply with International Health Regulations; to comply with eradication, elimination or control initiatives; to comply with immunization programme considerations);
c) recommendations of WHO's Strategic Advisory Group of Experts (SAGE) on immunization;
d) security of supplies: number, diversity, and production capacity of suppliers in the market…

Vaccines prequalification priority list 2013-14
http://www.who.int/immunization_standards/vaccine_quality/priority_pq_vaccines_2013_14/en/index.html
Extract
High priority vaccines
Bivalent oral polio (bOPV1+3)
DTwP based pentavalent combination (fully liquid DTwP-Hep B-Hib)
Diphtheria-tetanus-pertussis (DTwP)
Inactivated polio (IPV)
Measles-Rubella
Pneumococcal conjugate
Rotavirus
Trivalent oral polio (tOPV)
Yellow fever

WHO - Global Alert and Response (GAR)
Disease Outbreak News - Most recent news items
No new reports

WHO - Humanitarian Health Action
http://www.who.int/hac/en/index.html
No new reports

Conferences/Reports/Research/Analysis/Book Watch
Vaccines: 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

Report: WHO, WIPO, WTO - *Promoting Access to Medical Technologies and Innovation: Intersections between Public Health, Intellectual Property and Trade*
Extract from media release
For the first time, the three global intergovernmental bodies dealing with health, intellectual property and trade have pooled their expertise on a study of policies needed to advance medical and health technologies and to ensure they reach the people who need them. This report 'demystifies an intricate and extremely complex landscape of laws and policies and makes them accessible to the non-specialist.' WHO Director-General Dr Margaret Chan noted that the report "demystifies an intricate and extremely complex landscape of laws and policies and makes them accessible to the non-specialist. In so doing, it sets out a comprehensive and coherent inventory of legal instruments and policy options that can be drawn on to craft measures that meet national public health objectives."…
The book looks at the need for international cooperation, who is involved, and how to address the challenges that the sector is facing. It examines in detail the range of policy issues

from health and human rights and national, regional and global regulation policies, to intellectual property, trade and tariffs, procurement, free trade agreements and other aspects of policy. It studies a range of issues, such as: patents in the pharmaceutical sector; traditional medical knowledge; the importance of knowing what is patented and where, and how easy it is to find out; and questions of affordability and availability of medicines and market failure.
It looks in some depth at the development of medical technologies, modern research and development, ways of providing incentives for innovation, and ways of dealing with market failures, in particular with new products for treating neglected diseases. It includes comprehensive sections on trade and intellectual property rules and the flexibilities they contain for governments to meet various public health objectives.
See press release graphs and instructions on how to order the book
pdf, 407kb
Read a summary of the book
pdf, 78kb
http://www.who.int/mediacentre/news/releases/2013/book_launch_20130205/en/index.html

Meeting: ACIP (Advisory Committee on Immunization Practices) CDC
February 20-21, 2013
Atlanta, Georgia
Agenda (Feb 8 update) http://www.cdc.gov/vaccines/acip/meetings/downloads/agenda-archive/agenda-2013-02.pdf
Votes scheduled (from agenda)
Pneumococcal Vaccines
- PCV13 recommendations for children 6 through 18 years old with immunocompromising conditions
- Vaccines for Children
Haemophilus influenzae b (Hib) Vaccine
- Updated Hib Vaccine Recommendations
- Vaccines for Children: Hib-MenCY
Influenza
- Proposed 2013-2014 recommendations

WHO: Informal Consultation on Dual-Use Research of Concern (DURC)
26-28 February 2013
Geneva, Switzerland
WHO is convening an informal consultation on the broader issues regarding Dual-Use Research of Concern (DURC). The objective of this meeting is to share perspectives on key issues and concerns related to DURC, identify existing approaches and safeguards for managing DURC, consider critical gaps and actions to initiate. Stakeholders from public health, science, research policy, security, ethics, communications, and international agencies have been invited to participate. Following this consultation a report will be published on the WHO website.
http://www.who.int/mediacentre/events/meetings/2013/durc/en/index.html

Meeting: 8th International Conference on Typhoid Fever and Other Invasive Salmonelloses

1-2 March 2013
Dhaka, Bangladesh
Coalition against Typhoid, Bangladesh Pediatric Association, International Vaccine Institute, and icddr,b.

The primary goal of the conference will be to provide updates on research and public health agendas related to typhoid fever and other invasive salmonelloses and to present progress on typhoid, paratyphoid and non-typhoidal salmonella vaccines for public health use. A secondary goal of the conference will be to strengthen linkages between researchers and policy makers in the public health arena and in national governments. The conference discussion is expected to reveal knowledge gaps and to generate consensus regarding the typhoid, paratyphoid and non-typhoidal salmonelloses (NTS) research agenda.
http://www.typhoidconference.org/about

Journal Watch

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

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

American Journal of Public Health
Volume 103, Issue 3 (March 2013)
http://ajph.aphapublications.org/toc/ajph/current

Mortality and Morbidity Among Military Personnel and Civilians During the 1930s and World War II From Transmission of Hepatitis During Yellow Fever Vaccination: Systematic Review

Roger E. Thomas, Diane L. Lorenzetti, Wendy Spragins
American Journal of Public Health: March 2013, Vol. 103, No. 3: e16–e29.
Abstract

During World War II, nearly all US and Allied troops received yellow fever vaccine. Until May 1942, it was both grown and suspended in human serum. In April 1942, major epidemics of hepatitis occurred in US and Allied troops who had received yellow fever vaccine. A rapid and thorough investigation by the US surgeon general followed, and a directive was issued discontinuing the use of human serum in vaccine production.

The large number of cases of hepatitis caused by the administration of this vaccine could have been avoided. Had authorities undertaken a thorough review of the literature, they would have discovered published reports, as early as 1885, of postvaccination epidemics of hepatitis in both men and horses.

It would take 4 additional decades of experiments and epidemiological research before viruses of hepatitis A, B, C, D, and E were identified, their modes of transmission understood, and their genomes sequenced.

http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2012.301158

Annals of Internal Medicine
5 February 2013, Vol. 158. No. 3
http://www.annals.org/content/current
Letters
Assessing Whether Consent for a Clinical Trial Is Voluntary
Russell H. Horwitz, MD, PhD; Laura W. Roberts, MD; David W. Seal, PhD; Patrice Joseph, MD; Karen J. Maschke, PhD; Rose I. Verdier, MD; Sandy Nerette, MD; Jean W. Pape, MD; and Daniel W. Fitzgerald, MD
Background: Consent is necessary for the ethical conduct of clinical research, but ensuring that consent is both voluntary and informed is challenging in resource-poor settings. Previous efforts have focused on participant comprehension (1). We report the results of a study assessing whether consent to participate in an HIV vaccine trial done in Haiti was voluntary.
http://annals.org/article.aspx?articleid=1567858

BMC Public Health
(Accessed 9 February 2013)
http://www.biomedcentral.com/bmcpublichealth/content
Correspondence
Rome consensus conference - statement; Human Papilloma Virus diseases in males
Andrea Lenzi, Vincenzo Mirone, Vincenzo Gentile, Riccardo Bartoletti, Vincenzo Ficarra, Carlo Foresta, Luciano Mariani, Sandra Mazzoli, Saverio G Parisi, Antonio Perino, Mauro Picardo, Carla Maria Zotti BMC Public Health 2013, 13:117 (7 February 2013)
Abstract (provisional)
Background
Human Papillomavirus (HPV) is a very resistant, ubiquitous virus that can survive in the environment without a host. The decision to analyze HPV-related diseases in males was due to the broad dissemination of the virus, and, above all, by the need to stress the importance of primary and secondary prevention measures (currently available for women exclusively). The objective of the Consensus Conference was to make evidence-based recommendations that were designed to facilitate the adoption of a standard approach in clinical practice in Italy.
Methods
The Sponsoring Panel put a series of questions to the members of the Scientific Committee who prepared a summary of the currently available information, relevant for each question, after the review and grading of the existing scientific literature. The summaries were presented to a Jury, also called multidisciplinary Consensus Panel, who drafted a series of recommendations.
Results
The prevalence of HPV in males ranges between 1.3--72.9%. The prevalence curve in males is much higher than that in females and does not tend to decline with age. Women appear to have a higher probability of acquiring HPV genotypes associated with a high oncogenic risk, whereas in males the probability of acquiring low- or high-risk genotypes is similar. The HPV-related diseases that affect males are anogenital warts and cancers of the penis, anus and oropharynx. The quadrivalent vaccine against HPV has proved to be effective in preventing external genital lesions in males aged 16--26 years in 90.4% (95% CI: 69.2--98.1) of cases. It has also proved to be effective in preventing precancerous anal lesions in 77.5% (95% CI:

39.6--93.3) of cases in a per-protocol analysis and in 91.7% (95% CI: 44.6--99.8) of cases in a post-hoc analysis. Early ecological studies demonstrate reduction of genital warts in vaccinated females and some herd immunity in males when vaccine coverage is high, although males who have sex with males gained no benefit at all. Males with an immunodeficiency disease are at greater risk of developing disease. Infertility seems to be caused by HPV in some cases. Studies demonstrate vaccination to both genders can be more efficacious and social equity matters are to be taken into consideration.
Conclusions
The Jury made Recommendations based on the scientific evidence presented by the Scientific Committee. Accordingly, for prevention purposes and social fairness and equality, as both sexes are affected by the disease, the vaccination of 12-year-old males against HPV should be recommended in order to guaranty protection to everyone. Aspects related to healthcare policy and economic sustainability, are to be discussed by respective public system representatives. More campaigns to raise awareness through all institutional channels are needed, not only regarding anogenital warts, but for HPV-related diseases in general in males in accordance to new scientific evidences.
The complete article is available as a provisional PDF. The fully formatted PDF and HTML versions are in production.

Research article

Determinants of HPV vaccination intentions among Dutch girls and their mothers: a cross-sectional study

Hilde M van Keulen, Wilma Otten, Robert AC Ruiter, Minne Fekkes, Jim van Steenbergen, Elise Dusseldorp, Theo WGM Paulussen BMC Public Health 2013, 13:111 (6 February 2013)
Abstract (provisional)
Background
The Dutch government recently added universal Human Papilloma Virus (HPV) vaccination for 12-year-old girls to the existing national immunization program. The participation rate for the initial catch-up campaign for girls aged 13 to 16 years in 2009 was lower (47%) than expected (70%). To inform future HPV information campaigns, this paper examines the social and psychological determinants of the HPV vaccination intentions of girls aged 13 to 16 years and their mothers who were targeted by the Dutch catch-up campaign of 2009.
Methods
A random sample of girls and their mothers was chosen from the Dutch vaccination register and received a letter inviting them to participate (n = 5,998 mothers and daughters). In addition, a random sample was recruited via an online panel by a marketing research company (n = 650 mothers; n = 350 daughters). Both groups were asked to complete a web-based questionnaire with questions on social demographic characteristics, social-psychological factors and HPV vaccination intention. Backward linear regression analyses were conducted to examine which social-psychological factors were most dominantly associated with vaccination intention.
Results
Data from 952 mothers (14%) and 642 daughters (10%) were available for the intended analyses. The contribution of social demographic variables to the explained variance of HPV vaccination intention was small but significant for mothers (DeltaR2 = .01; p = .007), but not significant for daughters (DeltaR2 = .02; p = .17) after controlling for HPV vaccination uptake and the sample. In addition, social-psychological determinants largely contributed to the explained variance of HPV vaccination intention of mothers (DeltaR2 = .35; p < .001) and daughters (DeltaR2 = .34; p < .001). Attitudes, beliefs, subjective norms and habit strength were significantly associated with participants' HPV vaccination intentions.

Conclusions
Because of the large contribution of social-psychological variables to the explained variance of HPV vaccination intentions among the mothers and daughters, future communication strategies targeting HPV vaccination uptake should address attitudes, beliefs, subjective norms and habit strength. There is a need for longitudinal research to confirm the causality of the association between these determinants and HPV vaccination behavior indicated by this study.
The complete article is available as a provisional PDF. The fully formatted PDF and HTML versions are in production.

British Medical Bulletin
Volume 104 Issue 1 December 2012
http://bmb.oxfordjournals.org/content/current
[Reviewed earlier; No relevant content]

British Medical Journal
09 February 2013 (Vol 346, Issue 7894)
http://www.bmj.com/content/346/7894
[No relevant content]

Bulletin of the World Health Organization
Volume 91, Number 2, February 2013, 81-156
http://www.who.int/bulletin/volumes/91/2/en/index.html
Special Issue on Opioids.

Cost Effectiveness and Resource Allocation
(Accessed 9 February 2013)
http://www.resource-allocation.com/
[No new relevant content]

Emerging Infectious Diseases
Volume 19, Number 2—February 2013
http://www.cdc.gov/ncidod/EID/index.htm
[Reviewed earlier]

Eurosurveillance
Volume 18, Issue 6, 07 February 2013
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Surveillance and outbreak reports
Large measles outbreak in Geneva, Switzerland, January to August 2011: descriptive epidemiology and demonstration of quarantine effectiveness
by E Delaporte, CA Wyler Lazarevic, A Iten, P Sudr

Between January and August 2011, the canton of Geneva, Switzerland, experienced a large measles outbreak with 219 cases (47 cases per 100,000 inhabitants) in the context of an extensive epidemic in a neighbouring region of France. Most cases were young adults (median age: 18 years), often unaware of their vaccination status. The vast majority of cases were either not (81%) or incompletely vaccinated (8%). Thirty clusters with a total of 119 cases and a median cluster size of three (range: 2–15 cases) were identified. Overall, 44 cases were imported or linked to imported cases. Of 73 contacts of cases who were quarantined, 50 developed measles and caused six secondary cases. This compares to 81 secondary cases among 173 non-quarantined cases (relative risk: 0.26; 95% confidence interval: 0.06–0.65), demonstrating the effectiveness of well targeted quarantine measures in reducing transmission.

Global Health Governance
Volume VI, Issue 1: Fall 2012
– December 31, 2012
[Reviewed earlier]

Globalization and Health
[Accessed 9 February 2013]
http://www.globalizationandhealth.com/
[No new relevant content]

Health Affairs
February 2013; Volume 32, Issue 2
http://content.healthaffairs.org/content/current
Theme: New Era of Patient Engagement
[No specific relevant content on vaccines/immunization]

Health and Human Rights
Vol 14, No 2 (2012)
http://hhrjournal.org/index.php/hhr
[Reviewed earlier]

Health Economics, Policy and Law
Volume 8 - Issue 01 - January 2013
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
Special Section: ACA
[Reviewed earlier]

Health Policy and Planning
Volume 28 Issue 1 January 2013
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 9, Issue 2 February 2013
http://www.landesbioscience.com/journals/vaccines/toc/volume/9/issue/1/

COMMENTARIES

New generation of dendritic cell vaccines

Kristen J. Radford and Irina Caminschi
http://dx.doi.org/10.4161/hv.22487
Abstract:
Dendritic cells (DC) play a pivotal role in the induction and regulation of immune responses, including the induction of cytotoxic T lymphocytes (CTL) responses. These are essential for the eradication of cancers and pathogens including HIV and malaria, for which there are currently no effective vaccines. New developments in our understanding of DC biology have identified the key DC subset responsible for CTL induction, which is now an attractive candidate to target for vaccination. These DC are characterized by expression of novel markers Clec9A and XCR1, and a specialized capacity to cross-present antigen (Ag) from tumors and pathogens that do not directly infect DC. New generation DC vaccines that specifically target the cross-presenting DC in vivo have already demonstrated potential in preclinical animal models but the challenge remains to translate these findings into clinically efficacous vaccines in man. This has been greatly facilitated by the recent identification of the equivalent Clec9A+XCR1+ cross-presenting DC in human lymphoid tissues and peripheral tissues that are key sites for vaccination administration. These findings combined with further studies on DC subset biology have important implications for the design of new CTL-mediated vaccines.

SHORT REPORT

Knowledge of the HPV vaccine and its association with vaccine uptake among female higher-education students in Greece

Elisavet M. Donadiki, Rodrigo Jiménez-García, Valentin Hernandez-Barrera, Pilar Carrasco-Garrido, Ana López de Andrés, Isabel Jimenez-Trujillo and Emmanuel G. Velonakis
http://dx.doi.org/10.4161/hv.22548
Abstract:
The aims of the study were to assess the awareness and knowledge of HPV vaccination among female university and technological institutes students, and their association with vaccine uptake, and to identify the variables associated with higher levels of knowledge.

We conducted a cross-sectional study among females (age 18–26 y) at institutions of higher education (universities and technological institutes) in Athens (Greece). Data was collected by way of a self-completed questionnaire that included questions on vaccine uptake and four questions about knowledge. A new variable was created by adding up the correct answers (range 0–4) and categorizing them as "low level" (0–2) and high level of knowledge (> 2). Independent variables included: Vaccine uptake, socio-demographic characteristics and health and sexual behavior variables.

3,153 female students took part in this research (participation rate 87%), 25.82% of whom were vaccinated against HPV. Most participants (97.15%) correctly answered the question about the existence of HPV, but only 28.41% knew at which age the vaccination is recommended. Overall, 59.1% of respondents had a high level of knowledge regarding the vaccine. The multivariate logistic model showed that being vaccinated was positively and significantly associated with a high level of knowledge. Positive predictors of higher levels of

knowledge were: older age; being in a relationship; being a health sciences student; past HPV infection.

In conclusion, the level of knowledge and vaccine uptake among female higher-education students in Greece was below desirable levels. A high level of knowledge is positively associated with vaccine uptake. Health education efforts are needed to improve knowledge among all higher education students in Greece.

RESEARCH PAPERS

Correlates of comfort with alternative settings for HPV vaccine delivery

Annie-Laurie McRee, Paul L. Reiter, Jessica K. Pepper and Noel T. Brewer

http://dx.doi.org/10.4161/hv.22614

Abstract:

Low uptake of human papillomavirus (HPV) vaccine calls for innovative approaches. Offering the vaccine in settings outside the traditional medical home, such as schools and pharmacies, could increase use. We sought to characterize the acceptability of HPV vaccine delivery in these alternative settings using a national (US) sample of parents of adolescent males ages 11–17 y (n = 506) and their sons (n = 391) who completed our online surveys in Fall 2010. We used multivariable regression to identify correlates of parents' and sons' comfort with (i.e., acceptability of) alternative settings. Half of parents (50%) and over one-third of sons (37%) reported that they were comfortable with schools or pharmacies as locations for the sons to receive HPV vaccine. Parents and sons were more comfortable with HPV vaccination in alternative settings if the sons had not recently visited their health care providers or had previously received vaccines at school, or if parents and sons were comfortable talking with each other about new vaccines. Parents who perceived greater barriers to HPV vaccination were more comfortable with alternative settings, as were sons who perceived that their peers were more accepting of HPV vaccine (all $p < 0.05$). Offering HPV vaccine in alternative settings may increase vaccination, especially among hard-to-reach adolescents. For example, our results suggest that offering the vaccine in alternative settings to boys who had not had recent health care visits could increase uptake by more than 10%. Study findings also highlight factors that should be addressed to maximize the potential success of HPV vaccination programs.

Do the quality of the trials and the year of publication affect the efficacy of intervention to improve seasonal influenza vaccination among healthcare workers?: Results of a systematic review

Silvia Schmidt, Rosella Saulle, Domitilla Di Thiene, Antonio Boccia and Giuseppe La Torre

http://dx.doi.org/10.4161/hv.22736

Abstract:

Introduction: Despite longstanding recommendations by public-health authorities vaccination coverage in health care workers worldwide are poor. The aim of this study is to conduct a systematic review of the trials conducted to increase seasonal influenza vaccination rates among health care workers.

Results: 10 articles met the pre-determined criteria. For all article the score calculation was performed.

Discussion: The combination of an educational and a promotional element appeared the most effective in augmenting the influenza vaccination coverage among health care workers. But some cases, the intervention did not contribute to increasing the vaccination rates among health care workers. In any case, the quality of controlled trials plays an important role in the results obtained by carrying out a specific intervention and contributed to obtaining these debatable results.

Materials and Methods: Research was conducted using Scopus and PubMed database. We selected all clinical trials to perform the meta-analyses.

Research Papers

Adherence to rotavirus vaccination quality measures in a commercially insured population

Debra F. Eisenberg, T Gu and G Krishnarajah

Abstract:

Background

This retrospective study determined the level of compliance to rotavirus vaccination guidelines within a large, commercially insured US population, as well as compliance with PI, ACIP and HEDIS measures for rotavirus vaccination.

Methods

Medical and pharmacy claims were obtained from the HealthCore Integrated Research Database. Enrolled children were stratified into PI, ACIP and HEDIS cohorts. The PI cohort was subdivided into RV5 and RV1 cohorts due to the differences in dosing schedules and patients with mixed dosing were excluded from the these two cohorts. Patients identified in the HEDIS cohort were linked to the administering physicians.

Results

Of 162,614 patients in PI cohort, 27% did not receive rotavirus vaccinations, 24% (RV5) and 15% (RV1) had incomplete doses ($p < 0.0001$; RV1 vs. RV5). A total of 76% of patients completed RV5 series but not on schedule, 54% completed on schedule. A total of 85% of patients completed the RV1 series at any time, 69% completed on schedule. Among health plans, 53% of patients completed the series, 22% (RV5) and 15% (RV1) had incomplete doses ($p < 0.0001$). Of 2,086 physicians who treated ≥ 10 patients within the plan (regardless of vaccination status), 78% had > 50% of patients complete, 22% had > 90% of patients completed.

Conclusion

Despite both two effective rotavirus vaccines and national immunization recommendations, rotavirus vaccination remains underutilized for infants.

Special Focus: Vaccine Hesitancy

RESEARCH PAPERS

Does the relative importance of MMR vaccine concerns differ by degree of parental vaccine hesitancy?: An exploratory study

Charitha Gowda, Sarah E. Schaffer, Kristin Kopec, Arielle Markel and Amanda F. Dempsey

http://dx.doi.org/10.4161/hv.22065

Abstract

A pilot study on the effects of individually tailored education for MMR vaccine-hesitant parents on MMR vaccination intention

Charitha Gowda, Sarah E. Schaffer, Kristin Kopec, Arielle Markel and Amanda F. Dempsey

http://dx.doi.org/10.4161/hv.22821

Abstract

Infectious Diseases of Poverty

2012, 1

http://www.idpjournal.com/content

[Accessed 9 February 2013]

[No new relevant content]

International Journal of Infectious Diseases
February 2013, Vol. 17, No. 2
http://www.ijidonline.com/
[No relevant content]

JAMA
February 06, 2013, Vol 309, No. 5
http://jama.ama-assn.org/current.dtl
[No relevant content]

JAMA Pediatrics
January 2013 Vol 167, No. 1
http://archpedi.jamanetwork.com/issue.aspx?journalid=75&IssueID=926200
[Reviewed earlier]

Journal of Health Organization and Management
Volume 26 issue 6 - Published: 2012
http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest
[Reviewed earlier; No relevant content]

Journal of Infectious Diseases
Volume 207 Issue 5 March 1, 2013
http://www.journals.uchicago.edu/toc/jid/current
EDITORIAL COMMENTARY
Anna P. Durbin and Stephen S. Whitehead
The Dengue Human Challenge Model: Has the Time Come to Accept This Challenge?
J Infect Dis. (2013) 207(5): 697-699 doi:10.1093/infdis/jis749
Extract
(See the major article by Sun et al on pages 700–8.)

In an important article in this issue of the *Journal*, Sun et al describe the first human challenge of recipients of a live attenuated tetravalent dengue vaccine (TDV) with dengue virus (DENV) known to induce symptomatic disease [1]. The challenge viruses were originally evaluated as candidate vaccines for inclusion in a TDV vaccine but were underattenuated and induced mild dengue illness in vaccinees [2, 3]. In the current study, investigators evaluated the relationship between neutralizing antibody at the time of challenge and the ability to protect against viremia and symptomatic illness. Although the number of subjects was small, the authors found that subjects with higher titers of neutralizing antibody were protected. Importantly, enhanced viremia and enhanced disease were not observed.

A human challenge model for dengue could be useful in addressing the complexities of vaccine and drug development for dengue. These include the lack of an animal model that reproduces the disease observed in humans, the necessity of the vaccine to be effective against all 4 DENV serotypes, and the lack of an identified correlate of protection. Previously,

experimental infection of humans was essential in identifying the individual DENV serotypes, the mode of transmission of dengue, the incubation period of DENV, the kinetics of viremia, and the role of antibody in protection [4, 5].

Human challenge models have been used effectively in early phase clinical trials to provide a preliminary estimate of vaccine efficacy prior to engaging in large field efficacy studies and have also been used for drug development [6– …

MAJOR ARTICLES AND BRIEF REPORTS

Wellington Sun, Kenneth H. Eckels, J. Robert Putnak, Arthur G. Lyons, Stephen J. Thomas, David W. Vaughn, Robert V. Gibbons, Stefan Fernandez, Vicky J. Gunther, Mammen P. Mammen, Jr, John D. Statler, and Bruce L. Innis

Experimental Dengue Virus Challenge of Human Subjects Previously Vaccinated With Live Attenuated Tetravalent Dengue Vaccines

J Infect Dis. (2013) 207(5): 700-708 doi:10.1093/infdis/jis744

Abstract

Background. Protection against dengue requires immunity against all 4 serotypes of dengue virus (DENV). Experimental challenge may be useful in evaluating vaccine-induced immunity.

Methods. Ten subjects previously vaccinated with a live attenuated tetravalent dengue vaccine (TDV) and 4 DENV-naive control subjects were challenged by subcutaneous inoculation of either 103 plaque-forming units (PFU) of DENV-1 or 105 PFU of DENV-3. Two additional subjects who did not develop DENV-3 neutralizing antibody (NAb) from TDV were revaccinated with 104 PFU of live attenuated DENV-3 vaccine to evaluate memory response.

Results. All 5 TDV recipients were protected against DENV-1 challenge. Of the 5 TDV recipients challenged with DENV-3, 2 were protected. All DENV-3–challenge subjects who developed viremia also developed elevated liver enzyme levels, and 2 had values that were >10 times greater than normal. Of the 2 subjects revaccinated with DENV-3 vaccine, 1 showed a secondary response to DENV-2, while neither showed such response to DENV-3. All 4 control subjects developed dengue fever from challenge. Protection was associated with presence of NAb, although 1 subject was protected despite a lack of measurable NAb at the time of DENV-1 challenge.

Conclusions. Vaccination with TDV induced variable protection against subcutaneous challenge. DENV-3 experimental challenge was associated with transient but marked elevations of transaminases.

Journal of Global Infectious Diseases (JGID)

October-December 2012

Volume 4 | Issue 4

Page Nos. 187-224

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

[Reviewed earlier; No relevant content]

Journal of Medical Ethics

February 2013, Volume 39, Issue 2

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

[Reviewed earlier; No relevant content]

Journal of Medical Microbiology
February 2013; 62 (Pt 2)
http://jmm.sgmjournals.org/content/current
[Reviewed earlier; No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 1 Issue 4 December 2012
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

The Lancet
Feb 09, 2013 Volume 381 Number 9865 p423 – 506 e6 - 7
http://www.thelancet.com/journals/lancet/issue/current
[No relevant content]

The Lancet Infectious Disease
Feb 2013 Volume 13 Number 2 p97 - 182
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Medical Decision Making (MDM)
January 2013; 33 (1)
http://mdm.sagepub.com/content/current
Special Issue: Decision Aids and Risk Perception
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
December 2012 Volume 90, Issue 4 Pages 631–807
http://onlinelibrary.wiley.com/doi/10.1111/milq.2012.90.issue-4/issuetoc
[Reviewed earlier]

Nature
Volume 494 Number 7435 pp5-142 7 February 2013
http://www.nature.com/nature/current_issue.html
[No relevant content]

Nature Immunology
February 2013, Volume 14 No 2 pp101-185
http://www.nature.com/ni/journal/v14/n2/index.html
[Reviewed earlier; No relevant content]

Nature Medicine
February 2013, Volume 19 No 2 pp113-246
http://www.nature.com/nm/journal/v19/n2/index.html

Perspectives

Harnessing CD4+ T cell responses in HIV vaccine development - pp143 - 149
Hendrik Streeck, M Patricia D'Souza, Dan R Littman & Shane Crotty
doi:10.1038/nm.3054
There is renewed enthusiasm in developing an HIV vaccine and in understanding the requirements to elicit broadly neutralizing HIV-specific antibodies. In May 2012, a workshop convened researchers to discuss the interplay of CD4+ T cell and antibody responses to help identify key questions and areas of research that can inform future vaccine development. This Perspective summarizes the discussion of three main topics on the role of CD4+ T cells in HIV vaccine design.
Abstract
CD4+ T cells can perform a panoply of tasks to shape an effective response against a pathogen. Limited attention has been paid to the potential importance of functional CD4+ T cell responses in the context of the development of next-generation vaccines, including HIV vaccines. Many CD4+ T cell functions are newly appreciated and only partially understood. A workshop was held as a forum to bring together a small group of experts to exchange ideas on the role of CD4+ T cells in developing durable functional antibody responses, via follicular helper T cells, as well as on the roles of CD4+ T cells in other aspects of protective immunity. Here we discuss whether CD4+ T cell responses may represent a beneficial component of an efficacious HIV vaccine.

Public health challenges and prospects for malaria control and elimination - pp150 - 155
FOCUS ON MALARIA
Pedro L Alonso & Marcel Tanner
doi:10.1038/nm.3077
Malaria's death toll has been reduced as a result of global efforts over the last decade. Yet the rise of drug resistance and the plateauing of funding are still obstacles to eradicating the disease and reducing malaria burden. This review brings up the goals and challenges faced by researchers and the public health workforce and a way forward to effectively control and eliminate malaria.
Abstract
The past decade witnessed unprecedented efforts to control malaria, including renewed political and financial commitment and increased availability of both old and new strategies and tools. However, malaria still represents a major health burden, particularly in Africa. Important challenges such as the fragility of many health systems, the rise of insecticide and drug resistance, and particularly the expected decline both in funding and in the coverage of key interventions if they are not replaced as needed, urgently need to be addressed. Further research and development is also becoming increasingly crucial. Among other needs, common methodologies for estimating and tracking the malaria burden, new strategies to measure transmission, better understanding of immunity, and increased knowledge of the mechanisms and effects of resistance to drugs and insecticides stand out. The ongoing efforts in research and development for new antimalarial drugs, more sensitive point-of-care rapid diagnostic tests and new insecticides need further innovation and substantial strengthening. Clearly, efforts

should focus not only on Plasmodium falciparum but also and increasingly on Plasmodium vivax, the neglected human malaria parasite. Addressing these challenges in a comprehensive and timely way will allow us to sustain the gains made so far and make further progress in control and progressive elimination.

Immune mechanisms in malaria: new insights in vaccine development - pp168 - 178
FOCUS ON MALARIA
Eleanor M Riley & V Ann Stewart
doi:10.1038/nm.3083
Abstract
Early data emerging from the first phase 3 trial of a malaria vaccine are raising hopes that a licensed vaccine will soon be available for use in endemic countries, but given the relatively low efficacy of the vaccine, this needs to be seen as a major step forward on the road to a malaria vaccine rather than as arrival at the final destination. The focus for vaccine developers now moves to the next generation of malaria vaccines, but it is not yet clear what characteristics these new vaccines should have or how they can be evaluated. Here we briefly review the epidemiological and immunological requirements for malaria vaccines and the recent history of malaria vaccine development and then put forward a manifesto for future research in this area. We argue that rational design of more effective malaria vaccines will be accelerated by a better understanding of the immune effector mechanisms involved in parasite regulation, control and elimination.

Nature Reviews Immunology
February 2013 Vol 13 No 2
http://www.nature.com/nri/journal/v13/n2/index.html
[Reviewed earlier; No relevant content]

New England Journal of Medicine
February 7, 2013 Vol. 368 No. 6
http://content.nejm.org/current.shtml
Review Article - Global Health
Designing Tomorrow's Vaccines
Gary J. Nabel, M.D., Ph.D.
N Engl J Med 2013; 368:551-560
February 7, 2013 DOI: 10.1056/NEJMra1204186
Free full text:
http://www.nejm.org/doi/full/10.1056/NEJMra1204186

OMICS: A Journal of Integrative Biology
February 2013, 17(2)
http://online.liebertpub.com/toc/omi/17/2
[No relevant content]

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

January 2013 Vol. 33, No. 1
http://new.paho.org/journal/index.php?option=com_content&task=view&id=118&Itemid=219
[No relevant content]

The Pediatric Infectious Disease Journal
February 2013 - Volume 32 - Issue 2 pp: A11,99-196,e54-e93
http://journals.lww.com/pidj/pages/currenttoc.aspx
[Reviewed earlier]

Pediatrics
February 2013, VOLUME 131 / ISSUE 2
http://pediatrics.aappublications.org/current.shtml
[Reviewed earlier]

Pharmacoeconomics
February 2013 - Volume 31 - Issue 2 pp: 93-176
http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx
A Systematic Review of the Cost Effectiveness of Herpes Zoster Vaccination
Szucs, Thomas D.; Pfeil, Alena M.
Pharmacoeconomics. 31(2):125-136, February 2013.
doi: 10.1007/s40273-012-0020-7
Abstract:
Background: The varicella zoster virus (VZV) can cause two infections: chickenpox or herpes zoster (HZ). Whereas chickenpox infections are normally mild but common among children, HZ infections are common among elderly people and can give rise to post-herpetic neuralgia (PHN), a severe and painful complication.
Objectives: This review aimed to summarize the literature available on the cost effectiveness of HZ vaccination and to summarize key issues for decision makers to consider when deciding on the reimbursement of HZ vaccination.
Methods: We conducted a literature search of the databases PubMed and EMBASE using EndNote X4 from Thomson Reuters. The following combinations of keywords were used: 'herpes zoster vaccine' AND 'cost()effectiveness' or AND 'economic evaluation', 'herpes zoster vaccination' AND 'cost()effectiveness' or AND 'economic evaluation', 'varicella zoster vaccine' AND 'cost()effectiveness' or AND 'economic evaluation', and 'varicella zoster vaccination' AND 'cost()effectiveness' or AND 'economic evaluation'.
Results: A total of 11 studies were identified and included. Cost-effectiveness analyses of varicella zoster vaccination were excluded. The quality of the included studies ranged from 'moderate' to 'moderate to good' according to the British Medical Journal guidelines of Drummond and Jefferson and the Quality of Health Economic Studies (QHES) score of Ofman et al. Most studies evaluated the cost effectiveness of universal HZ vaccination in adults aged 50 years or 60 years and older. Data sources and model assumptions regarding epidemiology, utility estimates and costs varied between studies. All studies calculated costs per QALY, which allows comparing costs of interventions in different diseases. The costs per QALY gained and the incremental cost-effectiveness ratio (ICER) differed between studies depending on the age at vaccination, duration of vaccine efficacy, cost of vaccine course and economic perspective.

All but one of the studies concluded that most vaccination scenarios are cost effective and the vaccination of specific subgroups such as the older age group is most cost effective. Conclusions: Model input parameters such as age at vaccination, vaccine costs, HZ incidence, PHN length and duration of vaccine efficacy had a great impact on the estimated cost effectiveness of HZ vaccination. To compare the results of different cost-effectiveness studies of HZ vaccination, uniform methods should be used and the most important input parameters used for the different models should be critically assessed.

PLoS One
[Accessed 9 February 2013]
http://www.plosone.org/
The Effect of Perceived Risks on the Demand for Vaccination: Results from a Discrete Choice Experiment
Md Z. Sadique, Nancy Devlin, William J. Edmunds, David Parkin Research Article | published 08 Feb 2013 | PLOS ONE 10.1371/journal.pone.0054149
Abstract
The demand for vaccination against infectious diseases involves a choice between vaccinating and not vaccinating, in which there is a trade-off between the benefits and costs of each option. The aim of this paper is to investigate these trade-offs and to estimate how the perceived prevalence and severity of both the disease against which the vaccine is given and any vaccine associated adverse events (VAAE) might affect demand. A Discrete Choice Experiment (DCE) was used to elicit stated preferences from a representative sample of 369 UK mothers of children below 5 years of age, for three hypothetical vaccines. Cost was included as an attribute, which enabled estimation of the willingness to pay for different vaccines having differing levels of the probability of occurrence and severity of both the infection and VAAE. The results suggest that the severity of the health effects associated with both the diseases and VAAEs exert an important influence on the demand for vaccination, whereas the probability of these events occurring was not a significant predictor. This has important implications for public health policy, which has tended to focus on the probability of these health effects as the main influence on decision making. Our results also suggest that anticipated regrets about the consequences of making the wrong decision also exert an influence on demand.

PLoS Medicine
(Accessed 9 February 2013)
http://www.plosmedicine.org/
[No new relevant content]

PLoS Neglected Tropical Diseases
January 2013
http://www.plosntds.org/article/browseIssue.action
[No relevant content]

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

(Accessed 9 February 2013)
http://www.pnas.org/content/early/recent
[No new relevant content]

Public Health Ethics
Volume 5 Issue 3 November 2012
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Qualitative Health Research
March 2013; 23 (3)
http://qhr.sagepub.com/content/current
[No relevant content]

Science
8 February 2013 vol 339, issue 6120, pages 617-728
http://www.sciencemag.org/current.dtl
[No relevant content]

Science Translational Medicine
6 February 2013 vol 5, issue 171
http://stm.sciencemag.org/content/current
[No relevant content]

Vaccine
Volume 31, Issue 9, Pages 1255-1356 (18 February 2013)
http://www.sciencedirect.com/science/journal/0264410X
Use of measles supplemental immunization activities (SIAs) as a delivery platform for other maternal and child health interventions: Opportunities and challenges
Pages 1259-1263
Mira Johri, Jitendar K. Sharma, Mark Jit, Stéphane Verguet
Abstract
Measles supplementary immunization activities (SIAs) offer children in countries with weaker immunization delivery systems like India a second opportunity for measles vaccination. They could also provide a platform to deliver additional interventions, but the feasibility and acceptability of including add-ons is uncertain. We surveyed Indian programme officers involved in the current (2010–2012) measles SIAs concerning opportunities and challenges of using SIAs as a delivery platform for other maternal and child health interventions. Respondents felt that an expanded SIA strategy including add-ons could be of great value in improving access and efficiency. They viewed management challenges, logistics, and safety as the most important potential barriers. They proposed that additional interventions be selected using several criteria, of which importance of the health problem, safety, and contribution to health equity figured most prominently. For children, they recommended inclusion of basic interventions to address

nutritional deficiencies, diarrhoea and parasites over vaccines. For mothers, micronutrient interventions were highest ranked.

Polio eradication in India: Progress, but environmental surveillance and vigilance still needed

Review Article

Pages 1268-1275

Animesh Chatterjee, Sanjukta Vidyant, Tapan N. Dhole

Abstract

Poliomyelitis has appeared in epidemic form, become endemic on a global scale, and has been reduced to near elimination, all within the span of documented medical history. Nevertheless, effective vaccinations, global surveillance network, development of accurate viral diagnosis prompted the historical challenge, global polio eradication initiative (GPEI). Environmental surveillance of poliovirus means monitoring of wild polio virus (WPV) and vaccine derived polio virus (cVDPV) circulation in human populations by examining environmental specimens supposedly contaminated by human feces. The rationale for surveillance is based on the fact that PV-infected individuals, whether presenting with disease symptoms or not, shed large amounts of PV in the feces for several weeks. As the morbidity: infection ratio of PV infection is very low, and therefore this fact contributes to the sensitivity of poliovirus surveillance, which under optimal conditions can be better than that of the standard acute flaccid paralysis (AFP) surveillance. The World Health Organization (WHO) has included environmental surveillance of poliovirus in the new Strategic Plan of the Global Polio Eradication Initiative for years 2010–2012 to be increasingly used in PV surveillance, supplementing AFP surveillance and the strategic advisory group of experts on immunization (SAGE) recommended a switch from tOPV–bOPV to remove the threat of cVDPV2 and to accelerate the elimination of WPV type 1 and 3 as bOPV is a more immunogenic vaccine and to introduce one dose of IPV in their vaccination schedule prior to OPV cessation.

Cost-effectiveness of vaccination of the elderly against herpes zoster in The Netherlands

Original Research Article

Pages 1276-1283

Pieter T. de Boer, Koen B. Pouwels, Juul M. Cox, Eelko Hak, Jan C. Wilschut, Maarten J. Postma

Abstract

Background

Each year a substantial number of Dutch elderly suffers from herpes zoster (HZ), caused by the reactivation of the varicella zoster virus (VZV). A potential complication of HZ is postherpetic neuralgia (PHN) which results in a prolonged loss of quality of life. A large randomized clinical trial, labelled the Shingles Prevention study (SPS), demonstrated that a live attenuated VZV vaccine can reduce the incidence of HZ and PHN.

Objective

We aimed to estimate the incremental cost-effectiveness ratio (ICER) of vaccination of the elderly against HZ versus no such vaccination in The Netherlands.

Methods

A cohort model was developed to compare the costs and effects in a vaccinated and a non-vaccinated age- and gender-stratified cohort of immune-competent elderly. Vaccination age was varied from 60 to 75 years. Data from published literature such as the SPS were used for transition probabilities. The study was performed from the societal as well as the health care payer's perspective and results were expressed in euros per quality-adjusted life year (QALY) gained.

Results
In the base case, we estimated that vaccination of a cohort of 100,000 60-year-olds would prevent 4136 cases of HZ, 305 cases of PHN resulting in a QALY-gain of 209. From the societal perspective, a total of €1.9 million was saved and the ICER was €35,555 per QALY gained when a vaccine price of €87 was used. Vaccination of women resulted in a lower ICER than vaccination of men (€33,258 vs. €40,984 per QALY gained). The vaccination age with the most favourable ICER was 70 years (€29,664 per QALY gained). Parameters with a major impact on the ICER were the vaccine price and HZ incidence rates. In addition, the model was sensitive to utility of mild pain, vaccine efficacy at the moment of uptake and the duration of protection induced by the vaccine.
Conclusion
Vaccination against HZ might be cost-effective for ages ranging from 60 to 75 when a threshold of €50,000 per QALY gained would be used, at €20,000 per QALY this might not be the case. Additional information on the duration of vaccine-protection is needed to further optimize cost-effectiveness estimations.

Vaccine: Development and Therapy
(Accessed 9 February 2013)
http://www.dovepress.com/vaccine-development-and-therapy-journal
[No new relevant content]

Value in Health
Vol 16 | No. 1 | January-February 2013 | Pages 1-228
http://www.valueinhealthjournal.com/current
[Reviewed earlier; No relevant content]

From Google Scholar+: Dissertations, Theses, Selected Journal Articles

HIV Vaccine Development: Strategies for preclinical and clinical investigation
S Shapiro - AIDS Research and Human Retroviruses, 2013
This article discusses HIV vaccine discovery and candidate vaccine testing in the context of current realities of funding and clinical trial practice. Lacking perfect animal models for testing candidate HIV vaccines, clinical investigators have proposed a strategy of iterative...

[PDF] **Effect of an Intervention on Medical Resident Knowledge and Adult Immunization Rates**
LB Fick - FAMILY MEDICINE, 2013
... physician knowledge and awareness of vaccine recommendations, physician behavior may be affected in a positive manner, leading to increased vaccination rates in adult patients. This study assessed the change in adult...

[PDF] **Factors Affecting HPV Vaccine Use Among Recent Family Medicine Residency Graduates**
RE Post, PJ Carek, AG Mainous III, VA Diaz… - FAMILY MEDICINE, 2013

BACKGROUND AND OBJECTIVES: Many adolescents seek care by family physicians for well visits and have the opportunity for HPV vaccination during these visits. Limited information is available regarding what affects physicians in offering the vaccine. The...

DENDRITIC CELL (DC)-VACCINE THERAPY FOR PANCREATIC CANCER
AK Palucka, JF Banchereau, H Ueno - US Patent 20,130,028,915, 2013
Abstract: Compositions and methods for eliciting therapeutic immunity and improving clinical outcomes in patients with pancreatic cancer are disclosed herein. The present invention describes a dendritic cell (DC)-vaccine comprising DCs pulsed with peptides derived from...

Media Watch
Beginning in June 2012, *Vaccines: The Week in Review* expanded 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 of 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.

BBC
http://www.bbc.co.uk/
Accessed 9 February 2013
[See coverage above]

Economist
http://www.economist.com/
Accessed 9 February 2013
[No new, unique, relevant content]

Financial Times
http://www.ft.com
Accessed 9 February 2013
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 9 February 2013
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/

January/February 2013 Volume 92, Number 1
Accessed 9 February 2013
[No new unique, relevant content]

Foreign Policy
http://www.foreignpolicy.com/
Accessed 9 February 2013]
[No new unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 9 February 2013
[No new unique, relevant content]

The Huffington Post
http://www.huffingtonpost.com/
Accessed 9 February 2013
[No new unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 9 February 2013
[No new, unique, relevant content]

NPR/National Public Radio [U.S.]
Public Health
Accessed 9 February 2013
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 9 February 2013.

Reuters
http://www.reuters.com/
Accessed 9 February 2013
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page
Accessed 9 February 2013
MIND & MATTER
February 8, 2013, 8:32 p.m. ET
When Species Extermination Is a Good Thing
By MATT RIDLEY
It's not a race, exactly, but there's an intriguing uncertainty about whether a former U.S. president or a software magnate will cause the next deliberate extinction of a species in the wild. Will Jimmy Carter eradicate Guinea worm before Bill Gates eradicates polio?

Guinea worm will probably beat polio to the finish line of extinction.

It is more than a third of a century since a human disease was extinguished. The last case of smallpox was in 1977, and in those days health experts expected other diseases to follow smallpox quickly into oblivion. Polio has repeatedly disappointed campaigners by hanging on, though it now affects less than 1% as many people as at its peak in the 1950s.

The generosity of Bill Gates has done much to speed the decline of polio, and he and most experts now see its end within six years at most. India, 10 years ago the worst-affected country, has been polio-free since 2011, and only three countries still host the virus: Pakistan, Afghanistan and especially Nigeria. Though the murder of nine polio vaccinators in Pakistan by Islamists in December was a tragic setback, last year there were just 222 new polio cases world-wide.

As Mr. Gates recounted in his 2013 annual letter from the Gates Foundation, the reason for his optimism is that a new approach is bearing fruit, especially in northern Nigeria. Volunteers on foot (but guided by GPS and satellite imagery) map unrecorded villages and houses to identify gaps in vaccination programs.

The Guinea worm, a disease that the Carter Center has relentlessly pursued, will probably edge out polio to the disease extinction line. In 1986, more than 3.5 million Africans and Asians were afflicted with Guinea worm, or dracunculiasis; in 2012, just 542 caught the parasite.

The larvae of this nematode worm live inside freshwater copepods, or "water fleas." When the copepods are ingested in drinking water, the worms burrow through the stomach wall into the body cavity and mate. The females, which can reach 3 feet in length, then drill their way down the inside of the victim's legs over a year before erupting painfully from a burning blister on the foot. The victim is tempted to immerse the blister in water to cool it, which allows the worm to release its larvae to seek copepods. The only cure is to pull the worm out over many weeks, inch by inch, winding it round a stick as it emerges. There is no vaccine.

Filtering water to prevent the ingestion of water fleas and making sure infected people do not enter water are the best means of prevention. Guinea worm was first targeted for eradication before polio, and it, too, has been disappointingly stubborn. But last year the number of cases halved from the year before, meaning that there are fewer guinea worms left in the world than black rhinos. The handful of cases in Chad (10), Mali (7) and Ethiopia (4) are expected to dwindle to nothing this year, but there were 521 cases in South Sudan (mostly in just one county), where eradication might take one or two more years of hard work, urged on by Mr. Carter and backed by money from the Gates Foundation, the British government and other donors. Guinea worm would be the first animal to be deliberately driven extinct.

Supposing these two welcome eradications do happen this decade, what parasites go next? Don Hopkins of the Carter Center says lymphatic filariasis, another worm carried by mosquitoes, could be gone by 2020. Onchocerciasis, or river blindness, carried by black flies, is almost gone from the Americas but will take longer to eradicate in Africa.

The first bacterium to be driven extinct could be yaws, an infection of children related to the organism that causes syphilis, which disfigures many people, especially in Ghana, Ivory Coast, Papua New Guinea and the Solomon Islands. Easily treated now with a single dose of azithromycin, an antibiotic, yaws should be gone by 2020.

A version of this article appeared February 9, 2013, on page C4 in the U.S. edition of The Wall Street Journal, with the headline: When Species Extermination Is a Good Thing.

Washington Post
http://www.washingtonpost.com/
Accessed 9 February 2013

[No new, unique, relevant content]

***Twitter Watch* (9 February 2013 – 19:59)**

Items of interest from a variety of twitter feeds associated with immunization, vaccines and global public health. This capture is highly selective and is by no means intended to be exhaustive.

Seth Berkley @GAVISeth
If you know people going to #TED2013 & they have something to contribute to the vaccine challenge pls tell them to get in touch
1:42 PM - 9 Feb 13

Seth Berkley @GAVISeth
Going to #TED2013 in 2 wks to launch a TED challenge: Let No Vaccine Go To Waste. How to track every dose so that they are used & not wasted
1:40 PM - 9 Feb 13

UNICEF @UNICEF
These attacks are double tragedy: for health workers & family, and for children robbed of live-saving health. #protecthealthworkers @WHO
3:45 PM - 8 Feb 13

UNICEF @UNICEF
We join Nigerian Govt in condemning attacks on health workers. UNICEF @WHO [statement] http://goo.gl/5RBYO #ProtectHealthWorkers
3:20 PM - 8 Feb 13

WHO @WHO
WHO, @UNICEF joint statement condemning attacks on health workers in Nigeria http://goo.gl/5RBYO #ProtectHealthWorkers
3:05 PM - 8 Feb 13

Sabin Vaccine Inst. @sabinvaccine
New Study Highlights Chagas Disease as a Growing Health and Socio-economic Challenge | Sabin http://www.sabin.org/updates/pressreleases/new-study-highlights-chagas-disease-growing-health-and-socio-economic …
8:51 AM - 8 Feb 13

IVAC at JHSPH @IVACtweets
Final Reports Released: #Nigeria's 1st National #Vaccine Summit & Town Hall Meetings http://bit.ly/Wx5eTk
9:12 AM - 6 Feb 13

UNICEF @UNICEF
From Jan 20-25, India administered #polio vaccines to 172m children. Lessons from India, via @nytimes http://goo.gl/OSBav #Promise4Children

12:20 AM - 7 Feb 13

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