

Vaccines: The Week in Review
31 January 2011
Center for Vaccine Ethics & Policy

<http://centerforvaccineethicsandpolicy.wordpress.com/>

A program of

- Center for Bioethics, University of Pennsylvania
<http://www.bioethics.upenn.edu/>
- The Wistar Institute Vaccine Center
<http://www.wistar.org/vaccinecenter/default.html>
- Children's Hospital of Philadelphia, Vaccine Education Center
<http://www.chop.edu/consumer/jsp/microsite/microsite.jsp>

This weekly summary targets news and events in global vaccines ethics and policy gathered from key governmental, NGO and industry sources, key journals and other sources. This summary supports ongoing initiatives of the Center for Vaccine Ethics & Policy, and is not intended to be exhaustive in its coverage. Vaccines: The Week in Review is now also posted in pdf form and as a set of blog posts at <http://centerforvaccineethicsandpolicy.wordpress.com/>. This blog allows full-texting searching of some 1,200 items.

Comments and suggestions should be directed to

*David R. Curry, MS
Editor and
Executive Director
Center for Vaccine Ethics & Policy
david.r.curry@centerforvaccineethicsandpolicy.org*

Editor's Note

Beginning this week, we add the *British Medical Journal* to Journal Watch below. Please share suggestions for key, peer-reviewed journals for inclusion in our monitoring service.

GAVI announced that His Highness Sheikh Mohamed bin Zayed Al Nahyan, the Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, and the Bill & Melinda Gates Foundation entered into a partnership in which each committed US\$50 million for immunisation programmes in Afghanistan and Pakistan. Of the total US\$ 100 million, GAVI will receive US\$66 million to buy and deliver additional supplies of the five-in-one pentavalent vaccine and to support the introduction of new pneumococcal vaccines in Afghanistan.

http://www.gavialliance.org/media_centre/press_releases/partnership_for_immunisation.php

British Prime Minister David Cameron said that the United Kingdom would double its current contribution to polio eradication, and called on other donors to back the Global Polio Eradication Initiative. Prime Minister Cameron said: "I passionately believe that we have a once-in-a-lifetime opportunity to rid the world of the evil of polio. We have the vaccines and the tools to do it. All that's missing is real and sustained political will to see this effort through to the end. That's why I'm announcing today that the UK is prepared to fully vaccinate an additional 45 million children against polio, through a doubling of our support to the Global Polio Eradication

Initiative over the next two years. In return for that commitment, we ask other donors to do their bit, and affected countries to strengthen their routine immunisation programmes. We have come so far in eradicating polio. We are so close to delivering a polio-free world for all our children. Let's finish the job. And let's eradicate polio once-and-for-all."

Bill Gates, speaking at the World Economic Forum in Davos, Switzerland, announced that the Bill & Melinda Gates Foundation has committed an additional \$102 million to support efforts to stamp out the disease. "Eliminating the last one percent of polio requires the kind of political leadership shown by the UK government and Prime Minister Cameron today," Gates said. "Eradicating polio requires innovative thinking and political will, as well as funding from a range of donors, to support an aggressive program that will get the job done."

The U.K. said its commitment is subject to two conditions which will apply only to the additional £20m each year:

- first, that this additional support is underpinned by increased commitment to strengthen routine immunisation. Routine, country based immunisation programmes are vital to ensuring that polio eradication can be maintained in the future. Countries need to make national health systems capacity a priority now if we expect to maintain eradication in the future.

- second, that our support has the additional effect of leveraging more effort from others in order to broaden and deepen funding through a matching fund basis. How will the matching basis work? For every \$5 pledged by others from 1 January 2011 to 31 December 2012, the UK will increase its support by \$1 up to a maximum of the additional £40m announced.

The UK's challenge aims to help GPEI expand the donor base and strengthen sustainable funding options going into the future and creates an opportunity for others to get involved.

<http://www.gatesfoundation.org/press-releases/Pages/uk-government-polio-partnership-110128.aspx>

Bill Gates, co-chair of the Bill & Melinda Gates Foundation, commented on polio eradication in Pakistan, said, "We commend the government of Pakistan on its commitment to stop the transmission of the polio virus in Pakistan. In just a year's time, I have seen the tremendous progress that can take place and I'm confident that with this plan, and the will to carry it out, Pakistan will be able to eliminate polio. This effort is essential to eradicating polio globally. My colleagues and I are deeply committed to working closely with you to ensure success. The lives and health of children in Pakistan and throughout the world are at stake. We call on the government of Pakistan to hold a special polio summit to assess progress in six months and we stand by Pakistan as its partner in this important cause to rid the world of polio once and for all."

The Gates Foundation noted that it has pledged more than US\$1 billion to the global polio program in the last decade, including more than US\$85 million for the eradication program in Pakistan.

<http://www.gatesfoundation.org/press-releases/Pages/pakistan-polio-emergency-plan-110124.aspx>

WHO said that a Commission on Information and Accountability for Women's and Children's Health "will propose a framework for global reporting, oversight and accountability on women's and children's health" and "will create a system to track whether donations for women's and children's health are made on time, resources are spent wisely and transparently, and whether the desired results are achieved." WHO said the accountability framework proposed by the Commission will:

- track results and resource flows at global and country levels;
- identify a core set of indicators and measurement needs for women's and children's health;
- propose steps to improve health information and registration of vital events - births and deaths - in low-income countries, and
- explore opportunities for innovation in information technology to improve access to reliable information on resources and outcomes.

The Commission will report in May 2011.

http://www.who.int/topics/millennium_development_goals/accountability_commission/en/index.html

The Malaria Eradication Research Agenda (malERA) initiative announced publication in a supplement to PLoS Medicine, 25 January 2011, of a collection of 12 reviews, comprising three reflective pieces and nine research and development agendas. Pedro L. Alonso, chair of the malERA Steering Committee, commented, "I am delighted to see published this R&D agenda for malaria eradication, after an intense and perhaps unprecedented consultative process that lasted two years and involved more than 250 of the leading scientists in the malaria field and beyond".

<http://www.who.int/malaria/elimination/malera/en/index.html>

See *PLoS Medicine* in Journal Watch below.

The **Weekly Epidemiological Record (WER) for 28 January 2011**, vol. 86, 5 (pp 37–44) includes: Outbreak news – Yellow fever, Côte d'Ivoire; – Yellow fever, Uganda; Meeting of the Global Advisory Committee on Vaccine Safety, December 2010; WHO Strategic Advisory Group of Experts (SAGE) on immunization: Request for nominations <http://www.who.int/entity/wer/2011/wer8605.pdf>

The **MMWR for January 28, 2011** / Vol. 60 / No. 3, includes:

- [Updated Recommendations for Use of Meningococcal Conjugate Vaccines --- Advisory Committee on Immunization Practices \(ACIP\), 2010](http://www.cdc.gov/mmwr/pdf/wk/mm6003.pdf)
<http://www.cdc.gov/mmwr/pdf/wk/mm6003.pdf>

Twitter Watch

A selection of items of interest this week from a variety of twitter feeds from NGOs and other sources.

[gatesfoundation](#) Gates Foundation

Blog: Bill Gates on his upcoming annual letter and a new video about [#vaccines](#) and [#polio](#): <http://bit.ly/ffC4qH>

[Reuters](#) Reuters Top News

by sabinvaccine

Polio can be all but stopped in 3 years: Bill Gates <http://reut.rs/dMryCo>

[malariacentre](#) LSHTM Malaria Centre

Clinical testing of new molecular method for diagnosis of malaria infections is underway at LSHTM: <http://bit.ly/e039aL>

[whonews](#) WHO News

Emergency [#vaccination](#) campaign against yellow fever outbreak in Cote d'Ivoire <http://tinyurl.com/687rjsh> [#globalhealth](#) [#yellowfever](#)

Journal Watch

[Editor's Note]

Vaccines: The Week in Review continues its weekly scanning of key 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. Our initial scan list includes the journals below. If you would like to suggest other titles, please write to David Curry at david.r.curry@centerforvaccineethicsandpolicy.org

Annals of Internal Medicine

January 18, 2011; 154 (2)

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

[Reviewed last week; No relevant content]

British Medical Journal

29 January 2011 Volume 342, Issue 7791

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

News

Vaccination programme to protect children against pneumonia and diarrhoea needs more funds

Kate Womersley

Extract

Up to one million children's lives could be saved every year if new vaccines to tackle the causes of pneumonia and diarrhoea were widely available in the developing world, says a report from Save the Children published on 21 January.

Pneumonia and diarrhoea kill more under 5s globally than any other illnesses, accounting for three times more deaths than malaria and HIV combined. The report says that the death toll could be cut by up to one quarter if children were routinely vaccinated against these diseases.

The report charts progress towards achieving the United Nations' millennium development goals. Its authors found "extraordinary progress" in some countries, with some of the world's poorest—including Malawi, Nepal, Bolivia, and Bangladesh—being on track to achieve the goal of reducing child mortality by two thirds by 2015.

Clinical Infectious Diseases

Volume 52 Issue 4 February 15, 2011

<http://www.journals.uchicago.edu/toc/cid/current>

[Reviewed last wee; No relevant content]

Emerging Infectious Diseases

Volume 17, Number 1–January 2011

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

[Reviewed earlier; No relevant content]

Human Vaccines

Volume 7, Issue 1 January 2011

<http://www.landesbioscience.com/journals/vaccines/toc/volume/6/issue/12/>

[Reviewed earlier]

JAMA

January 26, 2011, Vol 305, No. 4, pp 329-423

<http://jama.ama-assn.org/current.dtl>

Commentaries

The Promise of Comparative Effectiveness Research

Paul Sullivan,

Don Goldmann

JAMA. 2011;305(4):400-401.doi:10.1001/jama.2011.12

[Initial language per JAMA convention]

The American Recovery and Reinvestment Act will provide an unprecedented stimulus for translational and health services research. A \$1.1 billion investment in comparative effectiveness research (CER) 1 should produce a torrent of new information about the effectiveness of drugs, technologies, and interventions. For this to result in better, more cost-effective health care, better evidence is needed to address the translational gap between clinical studies and everyday practice. 2 In essence, this is CER for implementation strategies (a type of CER seriously underrepresented in current

discourse, but necessary to deliver on the Institute of Medicine's goals for improved health care quality).

Credit is due to the US Department of Health and Human Services for recognizing this need. Evaluation of the implementation and dissemination strategies for mainstream CER is embedded within several programs funded by the American Recovery and Reinvestment Act that share the broad objective of spreading CER findings widely...

Journal of Infectious Diseases

Volume 203 Issue 4 February 15, 2011

<http://www.journals.uchicago.edu/toc/jid/current>

[Reviewed earlier; No relevant content]

The Lancet

Jan 29, 2011 Volume 377 Number 9763 Pages 353 - 438

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

Comment

Health in southeast Asia

William Summerskill, Richard Horton

Preview

Neglect of human rights that compromises health outcomes, the combination of high population density and domestic livestock that encourages zoonoses, claims over viral sovereignty, and an emphasis on health tourism that creates dual standards of care: too often health in southeast Asia is in the news for the wrong reasons. Today's Lancet reports good news from the region as well as disappointments, and provides opportunities to improve care locally by analysing how a variety of health systems in different settings within the region are responding to rapid socioeconomic change and shifting threats to health.

Dengue vaccine prospects: a step forward

Bruno Guy, Jeffrey Almond, Jean Lang

Preview

The worldwide expansion of dengue fever is a growing health problem. Crucial issues surround this global expansion and some of them present some challenges for vaccine development. Nevertheless, several promising approaches are being investigated in both academic and industrial laboratories.¹ Vaccine candidates include live, attenuated vaccines obtained via cell passages or by recombinant DNA technology (such as those being developed by the US National Institutes of Allergy and Infectious Diseases, InViragen, Walter Reed Army Institute of Research/GlaxoSmithKline, and Sanofi Pasteur), and subunit vaccines (such as those developed by Merck/Hawaii Biotech).

Series

Health and health-care systems in southeast Asia: diversity and transitions

Virasakdi Chongsuvivatwong, Kai Hong Phua, Mui Teng Yap, Nicola S Pocock, Jamal H Hashim, Rethy Chhem, Siswanto Agus Wilopo, Alan D Lopez

Southeast Asia is a region of enormous social, economic, and political diversity, both across and within countries, shaped by its history, geography, and position as a major crossroad of trade and the movement of goods and services. These factors have not only contributed to the disparate health status of the region's diverse populations, but

also to the diverse nature of its health systems, which are at varying stages of evolution. Rapid but inequitable socioeconomic development, coupled with differing rates of demographic and epidemiological transitions, have accentuated health disparities and posed great public health challenges for national health systems, particularly the control of emerging infectious diseases and the rise of non-communicable diseases within ageing populations.

The Lancet Infectious Disease

Feb 2011 Volume 11 Number 2 Pages 73 - 152

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

Editorial

A new market to save lives from pneumococcal disease

The Lancet Infectious Diseases

Pneumonia is the world's leading killer of children younger than 5 years, and is one of the foremost vaccine-preventable killers of children today. Every year, pneumococcal disease kills about 1 million children worldwide. Children younger than 5 years in low-income countries are 89 times more likely to die from pneumococcal disease than are children in high-income countries. In Nicaragua, 20% of children who get pneumococcal disease die, compared with a global average of 18%. Through introduction of an innovative financing mechanism called advance market commitment (AMC), developed by the GAVI Alliance, Nicaragua became the first developing country to introduce a new 13-valent pneumococcal vaccine in December last year, just months after the vaccine was made available in the USA.

Comment

Immunological correlates of protection for the RTS,S candidate malaria vaccine

Brian Greenwood

Evidence continues to accumulate that the candidate malaria vaccine RTS,S provides substantial, although not complete, protection against malaria in African children. In The Lancet Infectious Diseases today, Olotu and colleagues¹ add to this body of evidence, reporting persistence of protection for at least 15 months after vaccination of Kenyan and Tanzanian infants with the RTS,S candidate malaria vaccine formulated with the AS01 adjuvant. There was no evidence for a reduction in efficacy from that reported during the first 8 months of follow-up of this trial (around 50% efficacy).

Article

Efficacy of RTS,S/AS01E malaria vaccine and exploratory analysis on anti-circumsporozoite antibody titres and protection in children aged 5–17 months in Kenya and Tanzania: a randomised controlled trial

Ally Olotu, John Lusingu, Amanda Leach, Marc Lievens, Johan Vekemans, Salum Msham, Trudie Lang, Jayne Gould, Marie-Claude Dubois, Erik Jongert, Preeti Vansadia, Terrell Carter, Patricia Njuguna, Ken O Awuondo, Anangisye Malabeja, Omar Abdul, Samwel Gesase, Neema Mturi, Chris J Drakeley, Barbara Savarese, Tonya Villafana, Didier Lapierre, W Ripley Ballou, Joe Cohen, Martha M Lemnge, Norbert Peshu, Kevin Marsh, Eleanor M Riley, Lorenz von Seidlein, Philip Bejon

Summary

Background

RTS,S/AS01E is the lead candidate malaria vaccine. We recently showed efficacy against clinical falciparum malaria in 5–17 month old children, during an average of 8 months follow-up. We aimed to assess the efficacy of RTS,S/AS01E during 15 months of follow-up.

Methods

Between March, 2007, and October, 2008, we enrolled healthy children aged 5–17 months in Kilifi, Kenya, and Korogwe, Tanzania. Computer-generated block randomisation was used to randomly assign participants (1:1) to receive three doses (at month 0, 1, and 2) of either RTS,S/AS01E or human diploid-cell rabies vaccine. The primary endpoint was time to first clinical malaria episode, defined as the presence of fever (temperature $\geq 37.5^{\circ}\text{C}$) and a Plasmodium falciparum density of 2500/ μL or more. Follow-up was 12 months for children from Korogwe and 15 months for children from Kilifi. Primary analysis was per protocol. In a post-hoc modelling analysis we characterised the associations between anti-circumsporozoite antibodies and protection against clinical malaria episodes. This study is registered with ClinicalTrials.gov, number NCT00380393.

Findings

894 children were assigned, 447 in each treatment group. In the per-protocol analysis, 82 of 415 children in the RTS,S/AS01E group and 125 of 420 in the rabies vaccine group had first or only clinical malaria episode by 12 months, vaccine efficacy 39.2% (95% CI 19.5–54.1, $p=0.0005$). At 15 months follow-up, 58 of 209 children in the RTS,S/AS01E group and 85 of 206 in the rabies vaccine group had first or only clinical malaria episode, vaccine efficacy 45.8% (24.1–61.3, $p=0.0004$). At 12 months after the third dose, anti-circumsporozoite antibody titre data were available for 390 children in the RTS,S/AS01E group and 391 in the rabies group. A mean of 15 months (range 12–18 months) data were available for 172 children in the RTS,S/AS01E group and 155 in the rabies group. These titres at 1 month after the third dose were not associated with protection, but titres at 6.5 months were. The level of protection increased abruptly over a narrow range of antibody concentrations. The most common adverse events were pneumonia, febrile convulsion, gastroenteritis, and P falciparum malaria.

Interpretation

RTS,S/AS01E confers sustained efficacy for at least 15 months and shows promise as a potential public health intervention against childhood malaria in malaria endemic countries.

Funding

PATH Malaria Vaccine Initiative (MVI), GlaxoSmithKline.

Nature

Volume 469 Number 7331 pp443-574 27 January 2011

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

[No relevant content]

Nature Medicine

January 2011, Volume 17 No 1

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

[Reviewed earlier; No relevant content]

New England Journal of Medicine

January 27, 2011 Vol. 364 No. 4

<http://content.nejm.org/current.shtml>

[No relevant content]

The Pediatric Infectious Disease Journal

February 2011 - Volume 30 - Issue 2

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

[Reviewed last week]

Pediatrics

January 2011 / VOLUME 127 / ISSUE 1

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

[Reviewed earlier]

Pharmacoeconomics

February 1, 2011 - Volume 29 - Issue 2 pp: 87-172

<http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx>

[No relevant content]

Pharmacoeconomics & Outcomes News

January 22, 2011 - Volume - Issue 620 pp: 1-11

<http://adisonline.com/pecnews/pages/currenttoc.aspx>

[No relevant content]

PLoS Medicine

(Accessed 30 January 2011)

http://medicine.plosjournals.org/perlserv/?request=browse&issn=1549-1676&method=pubdate&search_fulltext=1&order=online_date&row_start=1&limit=10&document_count=1533&ct=1&SESSID=aac96924d41874935d8e1c2a2501181c#results

[A Research Agenda for Malaria Eradication: Diagnoses and Diagnostics](#)

Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000396

[A Research Agenda for Malaria Eradication: Health Systems and Operational Research](#)

Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000397

[A Research Agenda for Malaria Eradication: Vaccines](#)

Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000398

[A Research Agenda for Malaria Eradication: Basic Science and Enabling Technologies](#) Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000399

[A Research Agenda for Malaria Eradication: Monitoring, Evaluation, and Surveillance](#) Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000400

[A Research Agenda for Malaria Eradication: Vector Control](#)

Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000401

[A Research Agenda for Malaria Eradication: Drugs](#)

Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000402

[A Research Agenda for Malaria Eradication: Modeling](#)

Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000403

[A Research Agenda for Malaria Eradication: Cross-Cutting Issues for Eradication](#)

Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000404

[The Role of Research in Viral Disease Eradication and Elimination Programs: Lessons for Malaria Eradication](#)

Joel G. Breman, Ciro A. de Quadros, Walter R. Dowdle, William H. Foege, Donald A. Henderson, T. Jacob John, Myron M. Levine Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000405

[A Research Agenda to Underpin Malaria Eradication](#)

Pedro L. Alonso, Graham Brown, Myriam Arevalo-Herrera, Fred Binka, Chetan Chitnis, Frank Collins, Ogobara K. Doumbo, Brian Greenwood, B. Fenton Hall, Myron M. Levine, Kamini Mendis, Robert D. Newman, Christopher V. Plowe, Mario Henry Rodríguez, Robert Sinden, Laurence Slutsker, Marcel Tanner Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000406

[Some Lessons for the Future from the Global Malaria Eradication Programme \(1955–1969\)](#)

José A. Nájera, Matiana González-Silva, Pedro L. Alonso Review, published 25 Jan 2011

doi:10.1371/journal.pmed.1000412

Science

28 January 2011 vol 331, issue 6016, pages 365-496

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

News & Analysis

Epidemiology

Despite Sensitivities, Scientists Seek to Solve Haiti's Cholera Riddle

Martin Enserink

Summary

Several cholera experts have told Science that nailing the source of the recent cholera outbreak in Haiti could potentially embarrass the United Nations, distract from the day-to-day fight to control the outbreak, and even lead to violence. So their passion for traditional shoe-leather epidemiology has been tempered by diplomatic and strategic

concerns. Indeed, prominent cholera scientists declined to discuss the issue with Science or would only speak off the record. The U.S. Centers for Disease Control and Prevention is investigating the source, but a spokesperson referred questions about it to a panel charged by the U.N. secretary-general with investigating the outbreak.

Research Articles

Rapid Pneumococcal Evolution in Response to Clinical Interventions

Nicholas J. Croucher, Simon R. Harris, Christophe Fraser, Michael A. Quail, John Burton, Mark van der Linden, Lesley McGee, Anne von Gottberg, Jae Hoon Song, Kwan Soo Ko, Bruno Pichon, Stephen Baker, Christopher M. Parry, Lotte M. Lambertsen, Dea Shahinas, Dylan R. Pillai, Timothy J. Mitchell, Gordon Dougan, Alexander Tomasz, Keith P. Klugman, Julian Parkhill, William P. Hanage, and Stephen D. Bentley

Science 28 January 2011: 430-434.[DO

Abstract

Epidemiological studies of the naturally transformable bacterial pathogen *Streptococcus pneumoniae* have previously been confounded by high rates of recombination. Sequencing 240 isolates of the PMEN1 (Spain23F-1) multidrug-resistant lineage enabled base substitutions to be distinguished from polymorphisms arising through horizontal sequence transfer. More than 700 recombinations were detected, with genes encoding major antigens frequently affected. Among these were 10 capsule-switching events, one of which accompanied a population shift as vaccine-escape serotype 19A isolates emerged in the USA after the introduction of the conjugate polysaccharide vaccine. The evolution of resistance to fluoroquinolones, rifampicin, and macrolides was observed to occur on multiple occasions. This study details how genomic plasticity within lineages of recombinogenic bacteria can permit adaptation to clinical interventions over remarkably short time scales.

Science Translational Medicine

26 January 2011 vol 3, issue 67

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

Commentary

Pharmaceutical research -

Between Confidentiality and Scientific Exchange: The Place of Publication in Drug Discovery and Pharmaceutical Research

Martine Clozel

26 January 2011: 67cm2

Abstract

To continue to improve life expectancy and quality of life, the discovery of innovative therapies should be among the prime goals of the life sciences. The large majority of the drugs that are discovered and successfully developed to the point of being used by patients come from the drug industry, but publications from this sector are rare among life sciences research publications. Publications in the field of pharmaceutical drug discovery should take into account the confidentiality inherent to the protection of the intellectual property rights of a discovery, but they are fundamentally important because they can enhance scientific knowledge, improve the care and safety of patients, provide information for prescribers, and educate the public about the pharmaceutical industry.

Vaccine

Volume 29, Issue 7 pp. 1355-1526 (4 February 2011)

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

Regular Articles

[Vaccination against the 2009 pandemic influenza A \(H1N1\) among healthcare workers in the major teaching hospital of Sicily \(Italy\)](#) Original Research Article

Pages 1408-1412

Emanuele Amodio, Giovanna Anastasi, Maria Grazia Laura Marsala, Maria Valeria Torregrossa, Nino Romano, Alberto Firenze

Abstract

The aim of the study was to investigate factors involved in vaccination acceptance among healthcare workers (HCWs) and adverse reactions rates associated with pandemic influenza vaccination. The study was carried out in the major teaching hospital of Sicily from November 2009 to February 2010 on 2267 HCWs. A total of 407 (18%) HCWs were vaccinated against the 2009 pandemic influenza A (H1N1). A logistic regression analysis indicates an increased risk of non-vaccination against pandemic influenza in females (OR = 1.6; 95% CI = 1.3–2.1) compared to males, in nurses/technicians/administrative workers (OR = 1.7; 95% CI = 1.3–2.2) compared to doctors/biologists, and in HCWs who were non-vaccinated against seasonal influenza in 2008–2009 (OR = 4.9; 95% CI = 3.7–6.5) compared to vaccinated HCWs. Overall, 302 (74.2%) out of 407 questionnaires distributed to vaccinated HCWs were returned within the observation period. One hundred fifty-two workers (50.3%) experienced at least one adverse reaction (30.1%, local reactions; 6.6% systemic reactions and 13.6% both of them). The most frequent side effect of vaccination was pain at the injection site (43.4%). Twelve (3.9%) out of 302 HCWs stated they experienced influenza-like illness episodes during the follow-up period. The use of an adjuvanted vaccine against pandemic influenza A (H1N1) appears to be an effective and safe preventive strategy, showing a prevalence of both local and systemic adverse reactions not very different from that seen after vaccination with non-adjuvanted seasonal influenza vaccine. Despite this finding, vaccination coverage among HCWs remains very low, suggesting the need to implement educational campaigns directed to groups with lower coverage rates.

[The changing epidemiology of varicella incidence after implementation of the one-dose varicella vaccination policy](#) Original Research Article

Pages 1448-1454

Ie-Bin Lian, Yu-Zen Chien, Pi-Shan Hsu, Day-Yu Chao

Abstract

The varicella vaccine has been available in the Taiwan market since July 1997. Beginning 1998–1999, Taipei City and Taichung City/County as the early launch areas included the varicella vaccine in their free pediatric vaccination programs. By contrast, the national free vaccination program was not implemented until 2004. We aim to investigate the changing epidemiology of varicella incidence through an analysis of age–period–cohort effects. With the greatest decrease in varicella incidence occurring in children aged below 6, the incidence of varicella shifted to older age groups as reflected in different birth cohorts. The current study provides important implications for the current vaccination policy.