

Vaccines: The Week in Review 13 October 2012 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

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

Pakistan is first South Asian country to launch vaccine against childhood pneumoniaJoint WHO/UNICEF/GAVI Alliance media release

ISLAMABAD, 9 October 2012 - Mir Hazar Khan Bijrani, Minister of Inter-Provincial Coordination announced the introduction of a new vaccine to protect Pakistani children from pneumonia – a disease that takes the lives of approximately 1.3 million children globally before their fifth birthday. With this launch, Pakistan is the first country in South Asia to introduce the pneumococcal vaccine. "As the first country in South Asia to introduce the pneumococcal vaccine, Pakistan's commitment to immunizing all children against vaccine preventable diseases is to be applauded," said Dan Rohrmann, UNICEF Pakistan Country Representative. "We are proud to partner with the Government of Pakistan in its efforts to inoculate millions of children against a disease that continues to take too many lives."

http://www.who.int/immunization/newsroom/press/pakistan_first_country_pneumonia/en/index .html

The U.S. HHS announced the Implementation Plan for the 2010 National Vaccine Plan:

Implementation Plan Development and Structure

The National Vaccine Plan Implementation was developed by an interagency working group representing U.S. Department of Health and Human Services (HHS) agencies involved in all aspects of vaccines and immunizations. This working group additionally consulted with partner government agencies outside of HHS, including the U.S. Agency for International Development,

the Department of Veterans Affairs (VA), and the Department of Defense (DOD). Individual stakeholder input was obtained through a series of meetings, and is described further below.

The Implementation Plan follows the architecture of the National Vaccine Plan, is organized by the five goals, and focuses on the objectives and strategies related to achieving the 10 priorities described in the Plan (following). These priorities were established with input from the Institute of Medicine, the National Vaccine Advisory Committee, and the interagency working group. They provide strategic action steps to ensure the national has a robust immunization program. The priorities can relate to more than one goal in the National Vaccine Plan, but are presented with the most relevant goal within the Implementation Plan.

The Plan is built around five broad goals:

- Goal 1: Develop new and improved vaccines.
- Goal 2: Enhance the vaccine safety system.
- Goal 3: Support informed vaccine decision-making.
- Goal 4: Ensure a stable supply of, access to, and better use of recommended vaccines in the United States.

Goal 5: Increase global prevention of death and disease through safe and effective vaccination.

National Vaccine Plan Priorities for Implementation

- A. Develop a catalogue of priority vaccine targets of domestic and global health importance. (Goal 1)
- B. Strengthen the science base for the development and licensure of new vaccines. (Goals 1 and 2)
- C. Enhance timely detection and verification of vaccine safety signals and develop a vaccine safety scientific agenda. (Goal 2)
- D. Increase awareness of vaccines, vaccine-preventable diseases (VPDs), and the benefits/risks of immunization among the public, providers, and other stakeholders. (Goal 3)
- E. Use evidence-based science to enhance vaccine-preventable disease surveillance, measurement of vaccine coverage, and measurement of vaccine effectiveness. (Goal 4)
- F. Eliminate financial barriers for providers and consumers to facilitate access to routinely recommended vaccines. (Goal 4)
- G. Create an adequate and stable supply of routinely recommended vaccines and vaccines for public health preparedness. (Goal 4)
- H. Increase and improve the use of interoperable health information technology and electronic health records. (Goal 4)
- I. Improve global surveillance for vaccine-preventable diseases and strengthen global health information systems to monitor vaccine coverage, effectiveness, and safety. (Goal 5)
- J. Support global introduction and availability of new and under-utilized vaccines to prevent diseases of public health importance. (Goal 5)

The 2010 National Vaccine Plan is a national, not federal, plan that acknowledges the many areas where stakeholder actions are needed to achieve a specific goal. The activities that are described in this Implementation Plan are those that will be undertaken by federal departments and agencies for the years 2010-2015 in line with their respective missions to achieve the specific objectives described for each goal. The scope of work outlined in the Implementation Plan will depend on the availability of future funds and other resources.

Implementation Monitoring and Evaluation

The National Vaccine Program Office (NVPO) will regularly track and annually summarize progress on achieving the goals and priorities in the National Vaccine Plan, identify areas where progress is lagging, and propose corrective action where needed.

Key documents:

- 2010 National Vaccine Plan [PDF 356KB]
- National Vaccine Plan Implementation [PDF- 822 KB]
- <u>Implementation Plan: Summary of Stakeholder Meetings</u> [PDF- 982 KB] http://www.hhs.gov/nvpo/vacc_plan/

The Bill & Melinda Gates Foundation signed an agreement with the Islamic Development Bank for a program to fight contagious diseases including polio and provide food security in several countries, the Saudi Press Agency reported. The five-year program will cover projects mainly in Pakistan, Afghanistan and Nigeria, and is understood to be valued at about US\$277 million.

http://www.bloomberg.com/news/2012-10-08/gates-foundation-signs-deal-with-islamic-development-bank.html

http://www.arabianbusiness.com/bill-gates-teams-up-with-saudi-bank-for-polio-fight-475620.html

Aeras announced an agreement with GSK to jointly advance the clinical development of an investigational tuberculosis (TB) vaccine containing GSK's proprietary M72 antigen and AS01E adjuvant. The new agreement "comes after promising results from early stage clinical trials showed that the GSK TB vaccine candidate known as M72/AS01E has an acceptable safety and reactogenicity profile and demonstrated an immune response." Under the new agreement, Aeras and GSK will each provide resources to run a multi-center proof of concept clinical trial to test the vaccine candidate in healthy adults between 18 and 50 years of age. The Phase IIb trial is scheduled to begin in Kenya, India and South Africa next year pending approvals from authorities. Aeras CEO Jim Connolly said, "When considering the massive public health impact and costs to society of neglected diseases including tuberculosis, global financing for R&D remains critically low in this area. Working in partnership with GSK – sharing resources, capabilities and know-how – affords us the opportunity to conduct this pivotal, multi-country proof of concept trial, getting us that much closer to potentially one day having a TB vaccine that could protect adolescents and adults from one of the world's deadliest infectious diseases." PR Newswire (http://s.tt/1pE0I)

Update: Polio this week - As of 10 Oct 2012

Global Polio Eradication Initiative [Editor's Extract]

- **China one year polio-free:** 9 October 2012 marked 12 months since China's last polio case. In 2011, polio from Pakistan had infected the country, which had eradicated indigenous polio in 1994. China conducted a model response, and successfully stopped the outbreak in record time – three months from index to last case...

Afghanistan

- Two new cases were reported in the past week (WPV1s from Kandahar), bringing the total number of cases for 2012 to 21. One of the newly-reported cases is the most recent in the country, and had onset of paralysis on 20 September...

Pakistan

- Three new cases were reported in the past week (WPV1s from Khyber Pakhtunkhwa KP, Federally Administered Tribal Areas FATA, and Sindh), bringing the total number of cases for 2012 to 43. The new case from FATA is the most recent in the country and had onset of paralysis on 25 September.
- Additionally, a positive environmental sample was reported from Peshawar, KP (collected 13 September)...
- In response to recent cases, mop-ups were conducted last week in key areas of KP, Sindh and Punjab, targeting more than a million children under the age of five years.

The **Weekly Epidemiological Record (WER) for 12 October 2012**, vol. 87, 41 (pp. 389–400) includes:

- Recommended composition of influenza virus vaccines for use in the 2013 southern hemisphere influenza season

http://www.who.int/entity/wer/2012/wer8741.pdf

MMWR Early Release October 12, 2012 / Vol. 61 / Early Release

- <u>Multistate Outbreak of Fungal Infection Associated with Injection of Methylprednisolone</u>
<u>Acetate Solution from a Single Compounding Pharmacy — United States, 2012</u>

The MMWR Weekly for October 12, 2012 / Vol. 61 / No. 40 includes:

- <u>Evaluation of Vaccination Recall Letter System for Medicaid-Enrolled Children Aged 19–23</u> Months — Montana, 2011
- Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine for Adults with Immunocompromising Conditions: Recommendations of the Advisory Committee on Immunization Practices (ACIP)

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

Webinar: *Understanding the Post-2015 Development Agenda Process Opportunities and Challenges that Lay Ahead*

18 October 2012 – Time: 11:00 am – 12:30 pm EDT (Washington, DC USA) This event is free and open to the public PAHO/WHO 525 23rd ST NW Washington DC, 20037 Room 1017

Online: via Blackboard link:

- Spanish room: www.paho.org/virtual/SeminariosSDE
- English room www.paho.org/virtual/SDESeminars

For those who cannot follow the live seminar, it will be available later at: http://bit.ly/oxoRdS
Related readings:

- Realizing the Future We Want for All: Report to the Secretary-General http://bit.ly/SNc9r3
- Health in the Post-2015 UN Development Agenda: Thematic Think Piece http://bit.lv/RNN903

More at: http://new.paho.org/equity/index.php?

option=com_content&task=view&id=143&Itemid=1926#.UHcyzRo-WIc.twitter

IOM Report: Monitoring HIV Care in the United States: A Strategy for Generating National Estimates of HIV Care and Coverage

October 5, 2012

Board on Population Health and Public Health Practice

Approximately 1.2 million people in the United States live with HIV, and the number grows each year. In July 2010, the federal government released the National HIV/AIDS Strategy (NHAS), aimed at reducing HIV transmission, increasing access to care, improving health outcomes, and reducing health disparities for people living with HIV. NHAS is designed to build on Affordable Care Act provisions that will increase access to health insurance for people with HIV.

A critical part of federal efforts will be to accurately monitor the scope of the HIV/AIDS epidemic and the availability and success of treatment and prevention programs. For help in structuring its plans, the White House Office of National AIDS Policy asked the IOM to prepare two reports – the first was released in March 2012 – on monitoring HIV care in the U.S. Data collected from a nationally representative sample of people with HIV can be used to help monitor the effect of the ACA on health care coverage and utilization. Monitoring will provide an enhanced means of assessing the effect of the NHAS and the ACA on care received by people with HIV – knowledge that can inform future planning and guide potential redistribution of resources to improve the efficiency and quality of care and reduce health disparities. http://www.iom.edu/Reports/2012/Monitoring-HIV-Care-in-the-United-States-A-Strategy-for-Generating-National-Estimates-of-HIV-Care-and-Coverage.aspx

Conference: 2012 Science of Eliminating Health Disparities Summit- Building a

Healthier Global Society: Integrating Science, Practice, and Policy

U.S. Department of Health and Human Services (HHS)

http://www.nimhd.nih.gov/summit_site/

October 31 - November 2, 2012

Gaylord National Resort and Convention Center, National Harbor, Maryland

The 2012 Science of Eliminating Health Disparities Summit is the leading scientific gathering on health disparities. Thousands of participants will attend more than 100 sessions to exchange new knowledge, and learn about progress, successes, challenges, and opportunities in implementing innovative research. Sessions will also feature practice and policy interventions to inform health disparities science, and highlight the power and impact of multi-sector

partnerships in tackling the social, behavioral, environmental, economic, and biological factors that cause health disparities.

Millions of people globally experience health disparities, and far too many suffer from preventable diseases and health conditions. This is due in part to inadequate attention to their physical or environmental surroundings, and the circumstances into which they are born, grow, live, work, and age. There is increased multi-sector partnership among domestic and international partners to share best practices and enhance approaches to eliminate health disparities, with growing emphasis on the social determinants of health that affect socially disadvantaged and underserved communities.

http://www.nih.gov/news/health/oct2012/nimhd-09.htm

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 102, Issue 11 (November 2012) http://ajph.aphapublications.org/toc/ajph/current [No relevant content]

Annals of Internal Medicine

2 October 2012, Vol. 157. No. 7 http://www.annals.org/content/current [Reviewed earlier]

British Medical Bulletin

Volume 103 Issue 1 September 2012 http://bmb.oxfordjournals.org/content/current [Reviewed earlier]

British Medical Journal

13 October 2012 (Vol 345, Issue 7878) http://www.bmj.com/content/345/7878 [No relevant content]

Bulletin of the World Health Organization

Volume 90, Number 10, October 2012, 713-792 http://www.who.int/bulletin/volumes/90/10/en/index.html [Reviewed earlier]

Cost Effectiveness and Resource Allocation

(Accessed 13 October 2012)
http://www.resource-allocation.com/
[No new relevant content]

Emerging Infectious Diseases

Volume 18, Number 10—October 2012 http://www.cdc.gov/ncidod/EID/index.htm [Reviewed earlier; No relevant content]

Eurosurveillance

Volume 17, Issue 41, 11 October 2012

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

Rapid Communications

The Hajj: updated health hazards and current recommendations for 2012

by JA Al-Tawfiq, ZA Memish

Extract

This year the Hajj will take place during 24–29 October. Recent outbreaks of Ebola haemorrhagic fever in Uganda and the Democratic Republic of the Congo, cholera in Sierra Leone, and infections associated with a novel coronavirus in Saudi Arabia and Qatar required review of the health recommendations of the 2012 Hajj. Current guidelines foresee mandatory vaccination with quadrivalent meningococcal vaccine for all pilgrims, and yellow fever and poliomyelitis vaccine for pilgrims from high-risk countries. Influenza vaccine is strongly recommended.

Global Health Governance

Volume V, Issue 2: Spring 2012 [Reviewed earlier]

Globalization and Health

[Accessed 13 October 2012] http://www.globalizationandhealth.com/
[No new relevant content]

Health Affairs

October 2012; Volume 31, Issue 10

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

Theme: Current Challenges In Comparative Effectiveness Research

[No specific relevant content on vaccines/immunization]

Health and Human Rights

Vol 14, No 1 (2012) http://hhrjournal.org/index.php/hhr [Reviewed earlier]

Health Economics, Policy and Law

Volume 7 - Issue 03 - July 2012 http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue [Reviewed earlier]

Health Policy and Planning

Volume 27 Issue 7 October 2012

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

Advance Access: 9 October 2012-10-13

Original Paper:

From reaching every district to reaching every community: analysis and response to the challenge of equity in immunization in Cambodia Health Policy Plan

Sann Chan Soeung, John Grundy, Richard Duncan, Rasoka Thor, and Julian B Bilous first published online October 9, 2012 doi:10.1093/heapol/czs096

Abstract

Background An international review of the Cambodian Expanded Programme on Immunization (EPI) in 2010 and other data show that despite immunization coverage increases and vaccine preventable diseases incidence reductions, inequities in access to immunization services exist. Utilizing immunization and health systems literature, analysis of global health databases and the EPI review findings, this paper examines the characteristics of immunization access and outcome inequities, and describes proposed longer-term strategic and operational responses to these problems.

Findings The national programme has evolved from earlier central and provincial level planning to strengthening routine immunization coverage through the District level 'Reaching Every District Strategy'. However, despite remarkable improvements, the review found over 20% of children surveyed were not fully immunized, primarily from communities where inequities of both access and impact persist. These inequities relate mainly to socio-economic exposures including wealth and education level, population mobility and ethnicity. To address these problems, a shift in strategic and operational response is proposed that will include (a) a re-focus of planning on facility level to detect disadvantaged communities, (b) establishment of monitoring systems to provide detailed information on community access and utilization, (c) development of communication strategies and health networks that enable providers to adjust service delivery according to the needs of vulnerable populations, and (d) securing financial, management and political commitment for 'reaching every community'.

Conclusions For Cambodia to achieve its immunization equity objectives and disease reduction goals, a shift of emphasis to health centre and community is needed. This approach will

maximize the benefits of new vaccine introduction in the coming 'Decade of Vaccines', plus potentially extend the reach of other life-saving maternal and child health interventions to the socially disadvantaged, both in Cambodia and in other countries with a similar level of development.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

Volume 8, Issue 10 October 2012

http://www.landesbioscience.com/journals/vaccines/toc/volume/8/issue/10/

[Reviewed earlier]

International Journal of Infectious Diseases

October 2012, Vol. 16, No. 10

http://www.ijidonline.com/

[Reviewed earlier; No relevant content]

JAMA

October 10, 2012, Vol 308, No. 14 http://jama.ama-assn.org/current.dtl [No relevant content]

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 206 Issue 9 November 1, 2012 http://www.journals.uchicago.edu/toc/jid/current [No relevant content]

Journal of Global Infectious Diseases (JGID)

July-September 2012 Volume 4 | Issue 3 Page Nos. 139-186 http://www.jgid.org/currentissue.asp?sabs=n [Reviewed earlier]

Journal of Medical Ethics

October 2012, Volume 38, Issue 10 http://jme.bmj.com/content/current [Reviewed earlier]

Journal of Medical Microbiology

November 2012; 61 (Pt 11)

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

[No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 1 Issue 3 September 2012

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

[Reviewed earlier; No relevant content]

The Lancet

Oct 13, 2012 Volume 380 Number 9850 p1281 - 1358 http://www.thelancet.com/journals/lancet/issue/current

Correspondence

Global reduction in measles mortality

Suman Saurabh, Ritesh Kumar

Preview

Emily Simons and colleagues' insightful Article (June 9, p 2173)1 draws highly relevant conclusions for measles control.

Global reduction in measles mortality

David N Durrheim

Preview

The recent stalling of measles elimination efforts in Europe and Africa, and downwards revision of estimated measles deaths prevented, has tempered optimism that this killer of children will soon be vanquished.1–3 Progress in the Western Pacific region provides welcome optimism. Measles incidence declined from 27·0 in 2010 to 11·6 per million population in 2011.4

Global reduction in measles mortality

Michael Noll-Hussong

Preview

The study by Emily Simons and colleagues1 raises the important issue of measles surveillance and the intensified control measures that are needed to achieve mortality reduction targets. Simons and colleagues focus on the established spectrum of surveillance methods in their modelling approach, but one recently evolving surveillance technique should also be considered: internet search engine analytics.

Global reduction in measles mortality – Authors' reply

Emily Simons, Matthew Ferrari, Peter Strebel

Preview

In response to Suman Saurabh and Ritesh Kumar, although the rate of infection shares some features of SIR models, our aim was to use a flexible formulation that reproduced the key features of an SIR-type model. Specifically, the infection rate should scale positively with the proportion of the population that is susceptible. As correctly noted, we assume that the force of infection is constant throughout the year, although standard SIR formulations suggest the force of infection should change through time as S/N and I fluctuate.

Series

Equity in Child Survival, Health, and Nutrition

Strategies to improve health coverage and narrow the equity gap in child survival, health, and nutrition

Mickey Chopra, Alyssa Sharkey, Nita Dalmiya, David Anthony, Nancy Binkin, on behalf of the UNICEF Equity in Child Survival, Health and Nutrition Analysis Team *Summary*

Implementation of innovative strategies to improve coverage of evidence-based interventions, especially in the most marginalised populations, is a key focus of policy makers and planners aiming to improve child survival, health, and nutrition. We present a three-step approach to improvement of the effective coverage of essential interventions. First, we identify four different intervention delivery channels—ie, clinical or curative, outreach, community-based preventive or promotional, and legislative or mass media. Second, we classify which interventions' deliveries can be improved or changed within their channel or by switching to another channel. Finally, we do a meta-review of both published and unpublished reviews to examine the evidence for a range of strategies designed to overcome supply and demand bottlenecks to effective coverage of interventions that improve child survival, health, and nutrition. Although knowledge gaps exist, several strategies show promise for improving coverage of effective interventions—and, in some cases, health outcomes in children—including expanded roles for lay health workers, task shifting, reduction of financial barriers, increases in human-resource availability and geographical access, and use of the private sector. Policy makers and planners should be informed of this evidence as they choose strategies in which to invest their scarce resources.

Equity in Child Survival, Health, and Nutrition

The comparative cost-effectiveness of an equity-focused approach to child survival, health, and nutrition: a modelling approach

Carlos Carrera, Adeline Azrack, Genevieve Begkoyian, Jerome Pfaffmann, Eric Ribaira, Thomas O'Connell, Patricia Doughty, Kyaw Myint Aung, Lorena Prieto, Kumanan Rasanathan, Alyssa Sharkey, Mickey Chopra, Rudolf Knippenberg, on behalf of the UNICEF Equity in Child Survival, Health and Nutrition Analysis Team *Summary*

Progress on child mortality and undernutrition has seen widening inequities and a concentration of child deaths and undernutrition in the most deprived communities, threatening the achievement of the Millennium Development Goals. Conversely, a series of recent process and technological innovations have provided effective and efficient options to reach the most deprived populations. These trends raise the possibility that the perceived trade-off between equity and efficiency no longer applies for child health—that prioritising services for the poorest and most marginalised is now more effective and cost effective than mainstream approaches. We tested this hypothesis with a mathematical-modelling approach by comparing the costeffectiveness in terms of child deaths and stunting events averted between two approaches (from 2011—15 in 14 countries and one province): an equity-focused approach that prioritises the most deprived communities, and a mainstream approach that is representative of current strategies. We combined some existing models, notably the Marginal Budgeting for Bottlenecks Toolkit and the Lives Saved Tool, to do our analysis. We showed that, with the same level of investment, disproportionately higher effects are possible by prioritising the poorest and most marginalised populations, for averting both child mortality and stunting. Our results suggest that an equity-focused approach could result in sharper decreases in child mortality and stunting and higher cost-effectiveness than mainstream approaches, while reducing inequities in effective intervention coverage, health outcomes, and out-of-pocket spending between the most and least deprived groups and geographic areas within countries. Our findings should be

interpreted with caution due to uncertainties around some of the model parameters and baseline data. Further research is needed to address some of these gaps in the evidence base. Strategies for improving child nutrition and survival, however, should account for an increasing prioritisation of the most deprived communities and the increased use of community-based interventions.

The Lancet Infectious Disease

Oct 2012 Volume 12 Number 10 p737 – 816 e1 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

Medical Decision Making (MDM)

September–October 2012; 32 (5) http://mdm.sagepub.com/content/current [Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy
September 2012 Volume 90, Issue 3 Pages 417–629
http://onlinelibrary.wiley.com/doi/10.1111/milq.2012.90.issue-3/issuetoc
[Reviewed earlier; No relevant content]

Nature

Volume 490 Number 7419 pp143-304 11 October 2012 http://www.nature.com/nature/current_issue.html [No relevant content]

Nature Immunology

October 2012, Volume 13 No 10 pp901-1019
http://www.nature.com/ni/journal/v13/n10/index.html **Focus issue:**Chacks and Palances in the Immune System

Checks and Balances in the Immune System

[Reviewed earlier]

Nature Medicine

October 2012, Volume 18 No 10 pp1443-1592 http://www.nature.com/nm/journal/v18/n10/index.html [No relevant content]

Nature Reviews Immunology

October 2012 Vol 12 No 10

http://www.nature.com/nri/journal/v12/n10/index.html

[No relevant content]

New England Journal of Medicine

October 11, 2012 Vol. 367 No. 15 http://content.nejm.org/current.shtml [No relevant content]

OMICS: A Journal of Integrative Biology

September 2012, 16(9) http://online.liebertpub.com/toc/omi/16/7-8 [No relevant content]

The Pediatric Infectious Disease Journal

October 2012 - Volume 31 - Issue 10 pp: 9-1105,e176-e188 http://journals.lww.com/pidj/pages/currenttoc.aspx [Reviewed earlier]

Pediatrics

October 2012, VOLUME 130 / ISSUE 4 http://pediatrics.aappublications.org/current.shtml [No relevant content]

Pharmacoeconomics

November 1, 2012 - Volume 30 - Issue 11 pp: 981-1096 http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx [No relevant content]

PLoS One

[Accessed 13 October 2012]

http://www.plosone.org/article/browse.action;jsessionid=577FD8B9E1F322DAA533C413369CD6F3.ambra01?field=date

Attitudes of the General Public and General Practitioners in Five Countries towards
Pandemic and Seasonal Influenza Vaccines during Season 2009/2010

Patricia R. Blank, Genevieve Bonnelye, Aurore Ducastel, Thomas D. Szucs PLoS ONE: Research Article, published 11 Oct 2012 10.1371/journal.pone.0045450 Abstract

Background

Vaccination coverage rates for seasonal influenza are not meeting national and international targets. Here, we investigated whether the 2009/2010 A/H1N1 pandemic influenza affected the uptake of influenza vaccines.

Methodology/Principal Findings

In December 2009/January 2010 and April 2010, 500 randomly selected members of the general public in Germany, France, the United States, China, and Mexico were surveyed by telephone about vaccination for seasonal and A/H1N1 pandemic influenza. Also, in April 2010, 100 randomly selected general practitioners were surveyed. Adult vaccine coverage in December 2009/January 2010 for A/H1N1 pandemic and seasonal influenza were, respectively, 12% and 29% in France, 11% and 25% in Germany, 41% and 46% in the US, 13% and 30% in Mexico, and 12% and 10% in China. Adult uptake rates in April 2010 were higher in Mexico but similar or slightly lower in the other countries. Coverage rates in children were higher than in adults in the US, Mexico, and China but mostly lower in Germany and France. Germans and French viewed the threat of A/H1N1 pandemic influenza as low to moderate, whereas Mexicans, Americans, and Chinese viewed it as moderate to serious, opinions generally mirrored by general practitioners. The recommendation of a general practitioner was a common reason for receiving the pandemic vaccine, while not feeling at risk and concerns with vaccine safety and efficacy were common reasons for not being vaccinated. Inclusion of the A/H1N1 pandemic strain increased willingness to be vaccinated for seasonal influenza in the United States, Mexico, and China but not in Germany or France.

Conclusions/Significance

The 2009/2010 A/H1N1 influenza pandemic increased vaccine uptake rates for seasonal influenza in Mexico but had little effect in other countries. Accurate communication of health information, especially by general practitioners, is needed to improve vaccine coverage rates.

PLoS Medicine

(Accessed 13 October 2012) http://www.plosmedicine.org/article/browse.action?field=date [No new relevant content]

PLoS Neglected Tropical Diseases

September 2012 http://www.plosntds.org/article/browseIssue.action [Reviewed earlier]

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

(Accessed 13 October 2012)
http://www.pnas.org/content/early/recent
[No new relevant content]

Public Health Ethics

Volume 5 Issue 2 July 2012 http://phe.oxfordjournals.org/content/current [Reviewed earlier]

Trends in Molecular Medicine

Volume 18, Issue 10, Pages 575-626 (October 2012) http://www.sciencedirect.com/science/journal/14714914 [Reviewed earlier]

Science

12 October 2012 vol 338, issue 6104, pages 161-292 http://www.sciencemag.org/current.dtl
[No relevant content

Science Translational Medicine

10 October 2012 vol 4, issue 155 http://stm.sciencemag.org/content/current [No relevant content]

Vaccine

Volume 30, Issue 47 pp. 6609-6728 (19 October 2012) http://www.sciencedirect.com/science/journal/

Editorial

Nanovaccinology: The next generation of vaccines meets 21st century materials science and engineering

Tewodros Mamo, Gregory A. Poland Pages 6609-6611

[No abstract]

Estimated size of the population at risk of severe adverse events after smallpox vaccination in Israel

Original Research Article

Pages 6632-6635

Yael Levy, Emilia Anis, Ehud Kaliner, Itamar Grotto, Yehuda L. Danon

Abstract

Background

The population at risk of adverse events after smallpox vaccination has increased in recent years. This has important implications for preparedness strategies against bioterrorism with the variola virus. The aim of the study was to estimate the size of this special population in Israel. Methods

The study was conducted in January 2010. Data on patients with contraindications to smallpox vaccination, as delineated by the Israel Ministry of Health for planning post-event strategies, were retrieved from the computerized records of the Department of AIDS and Tuberculosis and the Transplantation Center of the Israel Ministry of Health. In addition, the database of the main Health Maintenance Organization in Israel which insures 60% of the national population was searched using ICD-9 codes and specific medications issued in the last quarter of 2009. Results

Of the 7,563,800 persons residing in Israel in January 2010, 326,318 were at risk of an adverse event after smallpox vaccination.

Conclusion

Approximately 4.3% of the Israeli population should not be exposed to the currently used smallpox vaccine. This knowledge is important to ensure the effectiveness of mass vaccination programs in the event of a bioterror attack.

<u>Probing the protective effects of a conformationally constrained nicotine vaccine</u> Original Research Article

Vaccine, Volume 30, Issue 47, Pages 6609-6728 (19 October 2012)

Pages 6665-6670

Amira Y. Moreno, Marc R. Azar, George F. Koob, Kim D. Janda

Abstract

Despite being consistently ranked as the leading cause of preventable death in the United States, about 20% of the population continues to smoke. Current smoking cessation therapies offer limited success, show high rates of relapse, and have potentially dangerous side effects, consequently emphasizing the need for alternative therapies. Immunopharmacotherapy aims to use highly specific antibodies to sequester nicotine in the bloodstream thus blunting passage into the brain and minimizing positive reinforcing effects. A successful vaccination strategy is dependent upon the appropriate hapten design, carrier protein and adjuvant which affect both the magnitude and affinity of the immune response elicited. Our laboratory previously demonstrated the use of molecular constraint as a means to increase the intrinsic immunogenicity and antigenicity of a nicotine vaccine. The present study expands upon those initial results and explores the protective effects of vaccination with both constrained hapten CNI and its unconstrained counterpart NIC. Our results demonstrate how immunization with CNI-KLH produces large amounts of moderate affinity anti-nicotine antibodies even when formulated with ALUM adjuvant, making it particularly relevant for human use. In contrast, vaccination with NIC-KLH produced moderate amounts of high affinity anti-nicotine antibodies. These differential responses proved critical in offering protecting effects. Vaccination with CNI, but not NIC, resulted in an increase of self-administration responding on a progressive ratio schedule using a high nicotine dose (0.03 mg/kg/infusion; ~2 cigarettes in human) as compared to KLH-controls. Furthermore, vaccination with CNI was able to antagonize the analgesic effects of a heavy bolus dose of nicotine (0.35 mg/kg). These results support our hypothesis that molecular constraint can be advantageously utilized to increase the immunogenicity of a nicotine vaccine. Furthermore in correlating the behavioral effects with the differential responses elicited, we shed light on the distinct roles of antibody concentration and affinity.

Distinguishing vaccine efficacy and effectiveness

Original Research Article

Pages 6700-6705

Eunha Shim, Alison P. Galvani

Abstract

Background

Mathematical models of disease transmission and vaccination typically assume that protective vaccine efficacy (i.e. the relative reduction in the transmission rate among vaccinated individuals) is equivalent to direct effectiveness of vaccine. This assumption has not been evaluated.

Methods

We used dynamic epidemiological models of influenza and measles vaccines to evaluate the common measures of vaccine effectiveness in terms of both the protection of individuals and disease control within populations. We determined how vaccine-mediated reductions in attack rates translate into vaccine efficacy as well as into the common population measures of 'direct',

'indirect', 'total', and 'overall' effects of vaccination with examples of compartmental models of influenza and measles vaccination.

Results

We found that the typical parameterization of vaccine efficacy using direct effectiveness of vaccine can lead to the underestimation of the impact of vaccine. Such underestimation occurs when the vaccine is assumed to offer partial protection to every vaccinated person, and becomes worse when the level of vaccine coverage is low. Nevertheless, estimates of 'total', 'indirect' and 'overall' effectiveness increase with vaccination coverage in the population. Furthermore, we show how the measures of vaccine efficacy and vaccine effectiveness can be correctly calculated.

Conclusions

Typical parameterization of vaccine efficacy in mathematical models may underestimate the actual protective effect of the vaccine, resulting in discordance between the actual effects of vaccination at the population level and predictions made by models. This work shows how models can be correctly parameterized from clinical trial data.

Vaccine: Development and Therapy

(Accessed 13 October 2012)
http://www.dovepress.com/vaccine-development-and-therapy-journal
[No new relevant content]

Value in Health

Vol 15 | No. 6 | September-October 2012 | Pages 791-990 http://www.valueinhealthjournal.com/current [No relevant content]

From Google Scholar: Dissertations, Theses, Selected Journal Articles

[PDF] <u>Linear Categorical Marginal Modeling of Solicited Symptoms in Vaccine Clinical Trials</u> WP Bergsma, EMD Aris, FS Tibaldi - Journal of Biopharmaceutical Statistics. ..., 2012 Abstract Analysis of the occurrence of adverse events, and in particular of solicited symptoms, following vaccination is often needed for the safety and benefit-risk evaluation of any candidate vaccine, and typically involves taking repeated measurements. In this ...

[PDF] Cost-effectiveness analysis of intranasal live attenuated vaccine (LAIV) versus injectable inactivated influenza vaccine (TIV) for Canadian children and adolescents

JE Tarride, N Burke, C Von Keyserlingk, D O'Reilly... - ... and Outcomes Research, 2012

Background: Influenza affects all age groups and is common in children. Between 15% and 42% of preschool-and school-aged children experience influenza each season. Recently, intranasal live attenuated influenza vaccine, trivalent (LAIV) has been approved in ...

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 CVERP 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. Most publications require either a registration or a feebased subscription for access. We will provide full-text where content is published without restriction, but most publications require registration and some subscription level.

Economist

http://www.economist.com/ Accessed 13 October 2012 [No new unique, relevant content]

Financial Times

http://www.ft.com Accessed 13 October 2012 [No new unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 13 October 2012 Leadership Toward Health for All 10/04/2012 Terry Waghorn, Contributor

How can a compassionate humanity meet the health care needs of the more than 2 billion people who live on less than \$2 per day? As chairman of the Novartis Foundation for Sustainable Development, Klaus M. Leisinger works to alleviate poverty-related health problems in the developing world at three levels: on-the-ground assistance with health care services and medicine; connecting global health-advancing resources with each other and with those who can benefit from them; and conducting high-level research, policy and communication work to catalyze sustainable health outcomes. Leisinger shared his thoughts with Momentum and Terry Waghorn of Forbes recently on how we can best work together to shape a healthier world. http://www.forbes.com/sites/terrywaghorn/2012/10/04/toward-health-for-all/

Foreign Affairs

http://www.foreignaffairs.com/ September/October 2012 Volume 91, Number 5 Accessed 13 October 2012 [No new unique, relevant content]

Foreign Policy

http://www.foreignpolicy.com/ Accessed 13 October 2012] [No new unique, relevant content]

The Guardian

http://www.guardiannews.com/ Accessed 13 October 2012

[No new, unique, relevant content]

The Huffington Post

http://www.huffingtonpost.com/ Accessed 13 October 2012

New Yorker

http://www.newyorker.com/ Accessed 13 October 2012 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 13 October 2012 [No new, unique, relevant content]

Reuters

http://www.reuters.com/ Accessed 13 October 2012 [No new, unique, relevant content]

Wall Street Journal

http://online.wsj.com/home-page Accessed 13 October 2012 [No new unique, relevant content]

Washington Post

http://www.washingtonpost.com/
Accessed 13 October 2012
[No new unique, relevant content]

Twitter Watch [accessed 13 October 2012 17:46]

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.

UNICEFVerified @UNICEF

Know what's the best way to control pandemics? No, it's not scientists in white coats. It's handwashing #iwashmyhands

12:17 PM - 13 Oct 12

World Bank @WorldBank

"It is time to bend the arc of history" - Pres Kim http://bit.ly/RkcBYD
2:00 AM - 13 Oct 12

World Bank Live @WorldBankLive

New <u>#MDGs</u> should be a 'catalytic' force for eliminating poverty. - Kim <u>http://bit.ly/Rn82Nf</u> #wblive

Retweeted by World Bank

8:10 PM - 12 Oct 12

Peter Speyer @PeterSpeyer

WHO Forum on Health Data Standardization and Interoperability, 12/3-4 in Geneva http://new.paho.org/equity/index.php?option=com_content&task=view&id=144&Itemid=1... #healthdata

Retweeted by **Amanda Glassman**

5:23 PM - 12 Oct 12

CDCgov @CDCgov

Join us Oct 16th at 1pm ET for the next <u>#CDCGrandRounds</u>: "Public Health Approaches to Reducing U.S. Infant Mortality" http://is.gd/kdxCbQ

11:00 AM - 12 Oct 12

Seth Berklev @GAVISeth

Good talk with former Japanese PM Naoto Kan who is part of UNSG's post 2015 MDGs high level commission on power of vaccines and GAVI's model

7:53 AM - 12 Oct 12

Seth Berkley @GAVISeth

Great WB&GAVI event on economic benefit of vaccines http://goo.gl/3i7w8 Encouraging finance ministers to prioritise immunisation funding

7:30 AM - 12 Oct 12

PAHO/WHO Equity @egpaho

Health in the post-2015 UN development agenda Thematic Think Piece UNAIDS UNICEF UNFPA WHO http://www.un.org/millenniumgoals/pdf/Think%20Pieces/8_health.pdf ... Retweeted by PAHO/WHO

2:47 PM - 11 Oct 12

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