

Vaccines and Global Health: The Week in Review 7 December 2013 Center for Vaccine Ethics & Policy (CVEP)

This weekly summary targets news, events, announcements, articles and research in the vaccine and global health ethics and policy space and is aggregated from key governmental, NGO, international organization and industry sources, key peer-reviewed journals, and other media channels. This summary proceeds from the broad base of themes and issues monitored by the Center for Vaccine Ethics & Policy in its work: it is not intended to be exhaustive in its coverage. Vaccines: The Week in Review is also posted in pdf form and as a set of blog posts at http://centerforvaccineethicsandpolicy.wordpress.com/. This blog allows full-text searching of over 3,500 entries. Comments and suggestions should be directed to

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Global Fund: Donors Pledge US\$12 Billion

The Global Fund said that donors at the launch of its Fourth Replenishment meeting pledged US\$12.0 billion for the next three years, "the largest amount ever committed to fight against AIDS, tuberculosis and malaria." The contributions announced include commitments from 25 countries, as well as the European Commission, private foundations, corporations and faith-based organizations. Among the ledges mage included:

- :: The United States pledged US\$4 billion, although that could rise as additional pledges are made by other donors, up to a maximum of US\$5 billion.
- :: The Government of Japan announced a contribution of US\$800 million.
- :: Canada announced that it is contributing US\$612 million to the Global Fund for the 2014-2016 period.
- :: Germany announced it is signing a binding agreement to contribute €600 million to the Global Fund for 2014-2016, consistent with an earlier pledge.
- :: In recent months, France, the United Kingdom and Nordic countries also announced large new commitments to the Global Fund.
- :: Bill Gates announced on Monday that the Bill & Melinda Gates Foundation is committing up to US\$500 million to the Global Fund for the 2014-2016 period. This includes US\$300 million previously announced and up to US\$200 million in new money that will be used to match other donor commitments.
- :: (RED) said that it is contributing US\$40 million over the next two years.
- :: Other companies and faith-based organizations also made significant pledges, including Chevron, BHP Billiton, Vale, Ecobank, Takeda Pharmaceutical Company and the United Methodist Church.

http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-12-03 Global Fund Donors Pledge USD 12 Billion/

The International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) and the Global Fund announced "a broad-based partnership to help prevent patients from being harmed by fake medicines." The organizations noted that "fake medicines are reported in virtually every region of the world. In high-income countries, incidence of fake medicines is less than 1% of market value according to the estimates of the countries concerned. Figures about sales of fake medicines rise to 10% globally, but in some areas of Asia, Africa and Latin America fake medicines may account for up to 30% of medicines in circulation. In Africa, one-third of all malaria medicines are probably fake. It is estimated that one in two medicines purchased on illegal Internet sites that hide their physical addresses is fake." Mark Dybul, Executive Director of the Global Fund, said, "We are at an historic moment. Effective treatments and technologies exist for HIV, TB and Malaria and our challenge at the Global Fund is to get those effective interventions to all patients that need them. Fake medicines compromise our mission to save lives. We are delighted to join forces with IFPMA and invite other partners to join our efforts to get effective, safe, genuine treatments to the people who need them."

http://www.ifpma.org/news/news-releases/news-details/article/ifpma-and-global-fund-collaborate-to-help-protect.html

WHO: Global Vaccine Action Plan — SAGE Assessment Report, 2013

20 pages

Summary of the SAGE Working Group evaluation of the progress against 12 indicator areas of the GVAP and associated recommendations.

http://www.who.int/entity/immunization/global_vaccine_action_plan/sage_dov_gvap_progress_report_2013.pdf

GAVI Watch: Media Releases/Statements

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

:: <u>Pneumococcal vaccine to protect more than a million children in Afghanistan from leading child killer</u> 07 December 2013

Pneumonia accounts for 25% of deaths of children under five in Afghanistan each year.

:: <u>GAVI Alliance names global health leader as Director of US strategy</u> 04 December 2013 Natasha Bilimoria to lead U.S. mobilisation, building strong support for life-saving vaccines for children in developing countries."

WHO "Feature": Syrian Arab Republic: put polio risk above all other interests December 2013

The push to immunize all children against polio has been hampered by the ongoing crisis in the Syrian Arab Republic. WHO and UNICEF have appealed to all parties to cooperate, including through temporary pauses in hostilities where needed, to allow vaccination campaigns to take place and for all children to be protected...

More: http://www.who.int/features/2013/syria-polio-vaccination/en/index.html

Update: Polio this week - As of 4 December 2013

Global Polio Eradication Initiative

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

[Editor's extract and bolded text]

- :: The 'high season' for polio transmission is seeing a dramatic expansion of polio in Pakistan. Over the past four months, 45 cases of wild poliovirus have been reported since August, with evidence of widespread geographic transmission across the country. By contrast, 25 cases had been reported for the period January to July.
- :: The situation in Pakistan is increasingly worrying to the global eradication effort, especially in Federally Administered Tribal Areas (FATA) which remains the main transmission zone in Pakistan. This area is also affected by an outbreak of circulating vaccine-derived poliovirus type 2 (cVDPV2). The risk of spread within the country and internationally is high.
- :: By contrast, cases during the 'high season' are on the decline in Nigeria. Since August, 8 cases have been reported, primarily from Borno and Kano states, compared to 42 cases for the January to July period.

Afghanistan

:: Two new WPV1 cases were reported in the past week. The total number of WPV cases for 2013 is now 11 (all WPV1). The two cases were reported from Batikot and Behsud districts in Nangarhar province. All WPV1 cases in 2013 are reported from Eastern Region, close to the Pakistan border. The most recent WPV1 case had onset of paralysis on 12 November from Batikot.

Pakistan

:: Six new WPV1 cases were reported in the past week. Five of the cases were reported from FATA and one from Peshawar, Khyber Pakhtunkhwa (KP). The total number of WPV1 cases for Pakistan in 2013 is now 70. The most recent WPV1 case had onset of paralysis on 16 November (from North Waziristan, FATA)...

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

The **Weekly Epidemiological Record (WER) for 6 December 2013**, vol. 88, 49 (pp. 521–532) includes:

- :: Rubella and congenital rubella syndrome control and elimination global progress, 2012
- :: Performance of acute flaccid paralysis (AFP) surveillance and incidence of poliomyelitis, 2013 http://www.who.int/entity/wer/2013/wer8849.pdf

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

http://www.who.int/csr/don/2013 03 12/en/index.html

- :: Yellow fever in Sudan update 3 December 2013
- :: Middle East respiratory syndrome coronavirus (MERS-CoV) update <u>2 December</u> 2013

WHO Statement: Fourth Meeting of the IHR Emergency Committee concerning MERS-CoV

4 December 2013

Excerpt

The fourth meeting of the Emergency Committee convened by the Director-General under the International Health Regulations (2005) [IHR (2005)] concerning MERS-CoV was held by teleconference on Wednesday, 4 December 2013, from 12:00 to 15:50 Geneva time (CET).

In addition to Members of the Emergency Committee, two expert advisors also participated1. A number of affected States Parties reporting recent cases of MERS-CoV – Kingdom of Saudi Arabia, Kuwait, Oman, Qatar and Spain – were also on the teleconference.

During the informational session of the meeting, the WHO Secretariat provided an update on and assessment of epidemiological and scientific developments, including a description of cases over time, notable recent clusters, detection by polymerase chain reaction testing of MERS-CoV in camels, and the public health preparation and experience of the Hajj pilgrimage.

The above affected States Parties presented on recent developments in their countries. After discussion and deliberation on the information provided, the Committee concluded that it saw no reason to change its previous advice to the Director-General. Based on a risk assessment of current information, it was the unanimous decision of the Committee that the conditions for a Public Health Emergency of International Concern (PHEIC) have not at present been met...

- ...Based on events since its last meeting, the Committee emphasized the need for:
- :: investigative studies, including international case-control, serological, environmental, and animal-human interface studies, to better understand risk factors and the epidemiology;
- :: further review and strengthening of such tools as standardized case definitions and surveillance and further emphasis on infection control and prevention...

http://www.who.int/mediacentre/news/statements/2013/mers cov 20131204/en/index.html

CDC/MMWR Watch [to 7 December 2013]

- :: <u>Measles Press Conference: 50th Anniversary of Measles Vaccine Transcript</u> December 5, 2013
- :: Measles Still Threatens Health Security Digital Press Kit December 5, 2013
- :: Measles Still Threatens Health Security Press Release December 5, 2013
- :: President Obama Signs Reauthorization of PEPFAR December 5, 2013

MMWR - December 6, 2013 / Vol. 62 / No. 48

- :: <u>Vaccination Coverage Among Persons with Asthma United States, 2010–2011 Influenza</u> Season
- :: Rubella and Congenital Rubella Syndrome Control and Elimination Global Progress, 2000–2012
- :: Announcement: National Influenza Vaccination Week December 8-14, 2013

European Medicines Agency Watch [to 7 December 2013]

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

No new relevant content

UN Watch [to 7 December 2013]

Selected meetings, press releases, and press conferences relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.un.org/en/unpress/

World Bank/IMF Watch [to 7 December 2013]

Selected media releases and other selected content relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.worldbank.org/en/news/all
No new relevant content.

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

Vaccines and Global Health: The Week in Review has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health, health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

No new relevant content.

Journal Watch

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

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

The American Journal of Bioethics

Volume 13, Issue 12, 2013

http://www.tandfonline.com/toc/uajb20/current#.Uhk8Az hflY

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

[Reviewed earlier]

American Journal of Infection Control

Vol 41 | No. 12 | December 2013 | Pages 1147-1302 http://www.ajicjournal.org/current [Reviewed earlier]

American Journal of Public Health

Volume 103, Issue 12 (December 2013) http://ajph.aphapublications.org/toc/ajph/current [Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

December 2013; 89 (6)

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

Perspective Piece

Gains and Future Road Map for the Elimination of Dog-Transmitted Rabies in the Americas

Alfonso Clavijo, Victor Javier Del Rio Vilas, Friederike Luise Mayen, Zaida Estela Yadon, Albino Jose Beloto, Marco Antonio Natal Vigilato, Maria Cristina Schneider, and Ottorino Cosivi Am J Trop Med Hyg 2013 89:1040-1042; doi:10.4269/ajtmh.13-0229 [No abstract]

Annals of Internal Medicine

3 December 2013, Vol. 159. No. 11

http://annals.org/issue.aspx

Examination of Links Between Herpes Zoster Incidence and Childhood Varicella Vaccination

Craig M. Hales, MD, MPH; Rafael Harpaz, MD, MPH; M. Riduan Joesoef, MD, PhD; and Stephanie R. Bialek, MD, MPH

Ann Intern Med. 2013;159(11):739-745. doi:10.7326/0003-4819-159-11-201312030-00006 http://annals.org/article.aspx?articleid=1784289

Abstract

Background: Introduction of a universal varicella vaccine program for U.S. children in 1996 sparked concern that less-frequent exposure to varicella would decrease external boosting of immunity to varicella zoster virus and thereby increase incidence of herpes zoster (HZ). Objective: To determine whether the varicella vaccination program has influenced trends in HZ incidence in the U.S. population older than 65 years.

Design: Retrospective study of Medicare claims.

Setting: Medicare, 1992 through 2010.

Participants: 2 848 765 beneficiaries older than 65 years.

Measurements: Annual HZ incidence from 1992 through 2010; rate ratios (RRs) for HZ incidence by age, sex, and race or ethnicity; and state-level varicella vaccination coverage. Results: 281 317 incident cases of HZ occurred. Age- and sex-standardized HZ incidence increased 39% from 10.0 per 1000 person-years in 1992 to 13.9 per 1000 person-years in 2010 with no evidence of a statistically significant change in the rate of increase after introduction of the varicella vaccination program. Before introduction of this program, HZ incidence was higher in women (RR, 1.21 [95% CI, 1.19 to 1.24]) than men and was lower in black persons (RR, 0.51 [CI, 0.48 to 0.53]) and Hispanic persons (RR, 0.76 [CI, 0.72 to 0.81]) than white persons. In a model adjusted for sex, age, and calendar year from 1997 to 2010, HZ incidence did not vary by state varicella vaccination coverage (RR, 0.9998 [CI, 0.9993 to 1.0003]). Limitation: Uncertain level and consistency of health-seeking behavior and access and uncertain

accuracy of disease coding.

Conclusion: Age-specific HZ incidence increased in the U.S. population older than 65 years even before implementation of the childhood varicella vaccination program. Introduction and widespread use of the vaccine did not seem to affect this increase. This information is reassuring for countries considering universal varicella vaccination.

Primary Funding Source: None.

BMC Public Health

(Accessed 7 December 2013)

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

Trends in influenza vaccination coverage in Portugal from 1998 to 2010: effect of major pandemic threats

Cátia Sousa Pinto, Baltazar Nunes, Maria João Branco and José Marinho Falcão BMC Public Health 2013, 13:1130 doi:10.1186/1471-2458-13-1130

Published: 5 December 2013

http://www.biomedcentral.com/1471-2458/13/1130/abstract

Abstract (provisional)

Background

Vaccination is the key measure available for prevention of the public health burden of annual influenza epidemics. This article describes national trends in seasonal influenza vaccine (IV) coverage in Portugal from 1998/99 to 2010/11, analyzes progress towards meeting WHO 2010 coverage goals, and addresses the effect of major public health threats of the last 12 years (SARS in 2003/04, influenza A (H5N1) in 2005/06, and the influenza A (H1N1)2009 pandemic) on vaccination trends.

Methods

The National Institute of Health surveyed (12 times) a random sample of Portuguese families. IV coverage was estimated and was adjusted for age distribution and country region. Independence of age and sex coverage distribution was tested using a modified F-statistic with a 5% significance level. The effect of SARS, A (H5N1), and the A (H1N1)2009 pandemic was tested using a meta-regression model. The model was adjusted for IV coverage in the general population and in the age groups.

Results

Between 1998/99 and 2010/11 IV, coverage in the general population varied between 14.2% (CI 95%: 11.6%--16.8%) and 17.5% (CI 95%: 17.6%--21.6%). There was no trend in coverage (p = 0.097). In the younger age group (<15 years) a declining trend was identified until 2008/09 (p = 0.005). This trend reversed in 2009/10. There was also a gradual and significant increase in seasonal IV coverage in the elderly (p for trend < 0.001). After 2006/07, IV coverage remained near 50%. Adjusting for baseline trends, there was significantly higher coverage in the general population in 2003/04 (p = 0.032) and 2005/06 (p = 0.018). The high coverage observed in the <15-year age group in season 2009/10 was also significant (p = 0.015).

Conclusions

IV coverage in the elderly population displayed an increasing trend, but the 75% WHO 2010 target was not met. This result indicates that influenza vaccination strategy should be improved to meet the ambitious WHO coverage goals. The major pandemic threats of the past decade had a modest but significant effect on seasonal influenza vaccination. There was an increase in vaccine uptake proportion in the general population in 2003/04 and in 2005/06, and in individuals <15 years old in 2009/10.

Effect of breastfeeding promotion interventions on cost-effectiveness of rotavirus immunization in Indonesia

Auliya A Suwantika and Maarten J Postma

BMC Public Health 2013, 13:1106 doi:10.1186/1471-2458-13-1106

Published: 1 December 2013

http://www.biomedcentral.com/1471-2458/13/1106/abstract

Abstract (provisional)

Background

Rotavirus infection has been reported to be responsible for the majority of severe diarrhea in children under-5-years-old in Indonesia. Breast milk is considered to protect against rotavirus infection and increasing breastfeeding promotion programs could be an alternative target to reduce the incidence of rotavirus diarrhea. This study aims to investigate the effect of breastfeeding promotion interventions on cost-effectiveness of rotavirus immunization in Indonesia, focusing on breastfeeding education and support interventions. Methods

An age-structured cohort model was developed for the 2011 Indonesia birth cohort. We compared four interventions in scenarios: (i) base-case (I0) reflecting the current situation for the population of under-5-years-old, (ii) with an additional breastfeeding education intervention (I1), (iii) with a support intervention on initiation and duration (I2) and (iv) with both of these two interventions combined (I3). The model applied a 5-year-time-horizon, with 1 month analytical cycles for children less than 1 year of age and annually thereafter. Monte Carlo simulations were used to examine the economic acceptability and affordability of rotavirus vaccination.

Results

Rotavirus immunization would effectively reduce severe cases of rotavirus during the first 5 years of a child's life even assuming various breastfeeding promotion interventions. The total yearly vaccine cost would amount to US\$ 64 million under the market vaccine price. Cost-effectiveness would increase to US\$ 153 (societal perspective) with an optimal breastfeeding promotion intervention. Obviously, this is much lower than the 2011 Gross Domestic Product (GDP) per capita of US\$ 3,495. Affordability results showed that at the market vaccine price, rotavirus vaccination could be affordable for the Indonesian health system.

Conclusions

Rotavirus immunization would be a highly cost-effective public health intervention for Indonesia even under various breastfeeding promotion interventions based on the WHO's criteria for cost-effectiveness in universal immunization.

British Medical Bulletin

Volume 108 Issue 1 December 2013 http://bmb.oxfordjournals.org/content/current [Reviewed earlier]

British Medical Journal

07 December 2013 (Vol 347, Issue 7936) http://www.bmj.com/content/347/7936

Research

Global determinants of mortality in under 5s: 10 year worldwide longitudinal study

BMJ 2013; 347 doi: http://dx.doi.org/10.1136/bmj.f6427 (Published 8 November 2013)

Cite this as: BMJ 2013;347:f6427

http://www.bmj.com/content/347/bmj.f6427

Open Access

Abstract

Objective To assess at country level the association of mortality in under 5s with a large set of determinants.

Design Longitudinal study.

Setting 193 United Nations member countries, 2000-09.

Methods Yearly data between 2000 and 2009 based on 12 world development indicators were used in a multivariable general additive mixed model allowing for non-linear relations and lag effects.

Main outcome measure National rate of deaths in under 5s per 1000 live births Results The model retained the variables: gross domestic product per capita; percentage of the population having access to improved water sources, having access to improved sanitation facilities, and living in urban areas; adolescent fertility rate; public health expenditure per capita; prevalence of HIV; perceived level of corruption and of violence; and mean number of years in school for women of reproductive age. Most of these variables exhibited non-linear behaviours and lag effects.

Conclusions By providing a unified framework for mortality in under 5s, encompassing both high and low income countries this study showed non-linear behaviours and lag effects of known or suspected determinants of mortality in this age group. Although some of the determinants presented a linear action on log mortality indicating that whatever the context, acting on them would be a pertinent strategy to effectively reduce mortality, others had a threshold based relation potentially mediated by lag effects. These findings could help designing efficient strategies to achieve maximum progress towards millennium development goal 4, which aims to reduce mortality in under 5s by two thirds between 1990 and 2015.

Bulletin of the World Health Organization

Volume 91, Number 12, December 2013, 897-972http://www.who.int/bulletin/volumes/91/12/en/index.html [Reviewed earlier]

Clinical Therapeutics

Vol 35 | No. 11 | November 2013 | Pages 1653-1864 http://www.clinicaltherapeutics.com/current [Reviewed earlier; No relevant content]

Cost Effectiveness and Resource Allocation

(Accessed 7 December 2013)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases

December 2013 - Volume 26 - Issue 6 pp: v-v,493-588

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

Special Theme: ANTIMICROBIAL AGENTS

[Reviewed earlier; No relevant content]

Developing World Bioethics

December 2013 Volume 13, Issue 3 Pages ii–ii, 105–170 http://onlinelibrary.wiley.com/doi/10.1111/dewb.2013.13.issue-3/issuetoc [Reviewed earlier]

Development in Practice

Volume 23, Issue 7, 2013

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

[Reviewed earlier; No relevant content]

Emerging Infectious Diseases

Volume 19, Number 12—December 2013 http://www.cdc.gov/ncidod/EID/index.htm [Reviewed earlier]

The European Journal of Public Health

Volume 23 Issue 6 December 2013 http://eurpub.oxfordjournals.org/content/current [Reviewed earlier]

Eurosurveillance

Volume 18, Issue 49, 05 December 2013

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

Case of vaccine-associated measles five weeks post-immunisation, British Columbia, Canada, October 2013

by M Murti, M Krajden, M Petric, J Hiebert, F Hemming, B Hefford, M Bigham, P Van Buynder

Forum for Development Studies

Volume 40, Issue 3, 2013 http://www.tandfonline.com/toc/sfds20/current [No relevant content]

Globalization and Health

[Accessed 7 December 2013] http://www.globalizationandhealth.com/ [No new relevant content]

Global Health Governance

Summer 2013 Archive

http://blogs.shu.edu/qhq/category/complete-issues/summer-2013/

Special Series on Universal Health Coverage Global Health: Science and Practice (GHSP)

November 2013 | Volume 1 | Issue 3

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

Global Health: Science and Practice (GHSP)

November 2013 | Volume 1 | Issue 3

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

["A new no fee, open-access journal, was developed for global health professionals, particularly program implementers, to validate their experiences and program results by peer reviewers and to share them with the greater global health community."]
[Reviewed earlier]

Global Public Health

Volume 8, Issue 9, 2013

http://www.tandfonline.com/toc/rgph20/current#.UqNd7eKy_Kc

Social capital and health in the least developed countries: A critical review of the literature and implications for a future research agenda

William T. Story pages 983-999

Abstract

Research on the linkage between social capital and health has grown in recent years; however, there is a dearth of evidence from resource-poor countries. This review examines the association between social capital and physical health (including health behaviours) in the least developed countries (LDCs). Citations were searched using three databases from 1990 to 2011 using the keyword 'social capital' combined with the name of each of the 48 LDCs. Of the 14 studies reviewed, 12 took place in Africa and 2 in South Asia. All used cross-sectional study designs, including five qualitative and nine quantitative studies. The literature reviewed suggests that social capital is an important factor for improving health in resource-poor settings; however, more research is needed in order to determine the best measures for social capital and elucidate the mechanisms through which social capital affects health in the developing world. Future research on social capital and health in the developing world should focus on applying appropriate theoretical conceptualisations of social capital to the developing country context, adapting and validating instruments for measuring social capital, and examining multilevel models of social capital and health in developing countries.

Health Affairs

December 2013; Volume 32, Issue 12

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

Theme: The Future Of Emergency Medicine: Challenges & Opportunities

[No relevant content]

Health and Human Rights

Volume 15, Issue 1

http://www.hhrjournal.org/

Theme: Realizing the Right to Health Through a Framework Convention on Global Health

[Reviewed earlier]

Health Economics, Policy and Law

Volume 8 / Issue 04 / October 2013

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

[Reviewed earlier; No relevant content]

Health Policy and Planning

Volume 28 Issue 8 December 2013

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

Diarrhoeal diseases and the global health agenda: measuring and changing priority Jesse B. Bump1,*, Michael R. Reich2 and Anne M. Johnson2

Author Affiliations

1Department of International Health, Georgetown University, 3700 Reservoir RD NW, Washington, DC 20057, USA, 2Department of Global Health and Population, Harvard School of Public Health, 677 Huntington Ave, Boston, MA 02115, USA Accepted October 22, 2012.

Abstract

We investigate priority setting and the global health agenda by analysing the control of diarrhoeal diseases (CDD). CDD was one of the 'twin engines' of the 1980s' child survival movement, but now has a low priority on the global health agenda, even though diarrhoeal diseases still claim around 1.5 million children annually. In this article, we develop a framework and four indicators of priority to measure CDD's overall prominence on the global health agenda over the last three decades: trends in treatment coverage, changes in perceived priority, changes in financial support and institutional involvement and bibliographic trends. We find that CDD's priority is now one-sixth to one-third of its level in 1985. We then use political analysis to suggest strategies for reframing CDD as an issue and promoting its priority on the global health agenda.

Lessons learned in shaping vaccine markets in low-income countries: a review of the vaccine market segment supported by the GAVI Alliance

Shawn A.N. Gilchrist1,* and Angeline Nanni2

Accepted October 24, 2012.

http://heapol.oxfordjournals.org/content/28/8/838.abstract

Abstract

Objectives The Global Alliance for Vaccines and Immunization (GAVI) anticipated that growing demand for new vaccines could sufficiently impact the vaccines market to allow low-income countries (LICs) to self-finance new vaccines. But the time required to lower vaccine prices was underestimated and the amount that prices would decline overestimated. To better understand

how prices in the LIC vaccine market can be impacted, the vaccine market was retrospectively examined.

Design GAVI archives and the published literature on the vaccine markets in LICs were reviewed for the purpose of identifying GAVI's early assumptions for the evolution of vaccine prices, and contrasting these retrospectively with actual outcomes.

Results The prices in Phases I and II of GAVI-supported vaccines failed to decline to a desirable level within a projected 5-year timeframe. GAVI-eligible countries were unable to sustain newly introduced vaccines without prolonged donor support. Two key lessons can be applied to future vaccine market-shaping strategies: (1) accurate demand forecasting together with committed donor funding can increase supply to the LIC vaccines market, but even greater strides can be made to increase the certainty of purchase; and (2) the expected time to lower prices took much longer than 5 years; market competition is inherently linked to the development time for new vaccines—a minimum of 5–10 or more years. Other factors that can lower vaccine prices include: large-scale production or alternate financing mechanisms that can hasten vaccine price maturation.

Conclusions The impacts of competition on vaccine prices in the LIC new-vaccines market occurred after almost 10 years. The time for research and development, acquisition of technological know-how and to scale production must be accounted for to more accurately predict significant declines on vaccine prices. Alternate financing mechanisms and the use of purchase agreements should also be considered for lowering prices when planning new vaccine introductions.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

December 2013 Volume 9, Issue 12

http://www.landesbioscience.com/journals/vaccines/toc/volume/9/issue/12/

Generation of more effective cancer vaccines

Daniela Fenoglio, Paolo Traverso, Alessia Parodi, Francesca Kalli, Maurizio Zanetti, Gilberto Filaci*

https://www.landesbioscience.com/journals/vaccines/article/26147/ Abstract

Cancer vaccines represent a promising therapeutic approach for which prime time is imminent. However, clinical efficacy must be improved in order for cancer vaccines to become a valid alternative or complement to traditional cancer treatments. Considerable efforts have been undertaken so far to better understand the fundamental requirements for clinically-effective cancer vaccines. Recent data emphasize that important requirements, among others, are (1) the use of multi-epitope immunogens, possibly deriving from different tumor antigens; (2) the selection of effective adjuvants; (3) the association of cancer vaccines with agents able to counteract the regulatory milieu present in the tumor microenvironment; and (4) the need to choose the definitive formulation and regimen of a vaccine after accurate preliminary tests comparing different antigen formulations. The first requirement deals with issues related to HLA restriction of tumor antigen presentation, as well as usefulness of tumor antigen spreading and counteraction of immune escape phenomena, linked to tumor antigen down-modulation, for an effective anti-cancer immune response. The second point underscores the necessity of optimal activation of innate immunity to achieve an efficient adaptive anti-cancer immune response. The third point focuses on the importance to inhibit subsets of regulatory cells. The last requirement stresses the concept that the regimen and formulation of the vaccine impacts

profoundly on cancer vaccine efficacy. A new generation of cancer vaccines, provided with both immunological and clinical efficacy, will hopefully soon address these requirements.

<u>Influenza vaccination acceptance among diverse pregnant women and its impact on infant immunization</u>

Paula M Frew*, Siyu Zhang, Diane S Saint-Victor, Ashley C Schade, Samantha Benedict, Maral Banan, Xiang Ren, Saad B Omer

Abstract

Objective: We examined pregnant women's likelihood of vaccinating their infants against seasonal influenza via a randomized message framing study. Using Prospect Theory, we tested gain- and loss-frame message effects and demographic and psychosocial correlates of influenza immunization intention. We also explored interactions among pregnant women who viewed "Contagion" to understand cultural influences on message perception.

Methods: Pregnant women ages 18–50 participated in a randomized message framing study from September 2011 through May 2012 that included exposure to intervention or control messages, coupled with questionnaire completion. Venue-based sampling was used to recruit racial and ethnic minority female participants at locations throughout Atlanta, Georgia. Bivariate and multivariate analyses were conducted to evaluate key outcomes.

Results: The study population (n = 261) included many lower income (\leq \$20 000/yearly household earnings) pregnant participants (69.2%, n = 171) inclusive of Black/African Americans (88.5%, n = 230), Hispanic/Latinas (7.3%, n = 19), and Other/Multicultural women (4.2%, n = 11). Both gain [OR = 2.13, 90% CI: (1.120, 4.048)] and loss-frame messages [OR = 2.02, 90% CI: (1.083, 3.787)] were significantly associated with infant influenza vaccination intention compared with the control condition. Intention to immunize against influenza during pregnancy had a strong effect on intent to immunize infants [OR = 10.83, 90%CI: (4.923, 23.825)]. Those who had seen the feature film "Contagion" (n = 54, 20.69%) viewed gain- and loss-framed messages as appealing (x2 = 6.03, p = 0.05), novel (x2 = 6.24, p = 0.03), and easy to remember (x2 = 16.33, p = 0.0003).

Conclusions: In this population, both gain- and loss-framed messages were positively associated with increased maternal intent to immunize infants against influenza. Message resonance was enhanced among those who saw the film "Contagion." Additionally, history of immunization was strongly associated with infant immunization intention.

Special Focus: Vaccine Acceptance

Research Paper

<u>Influenza vaccination acceptance among diverse pregnant women and its impact on infant immunization</u>

Paula M Frew, Siyu Zhang, Diane S Saint-Victor, Ashley C Schade, Samantha Benedict, Maral Banan, Xiang Ren and Saad B Omer http://dx.doi.org/10.4161/hv.26993
Research Paper

<u>Predictive factors associated with the acceptance of pandemic and seasonal influenza vaccination in health care workers and students in Tuscany, Central Italy</u>
Guglielmo Bonaccorsi, Chiara Lorini, Francesca Santomauro, Silvia Guarducci, Elettra Pellegrino, Francesco Puggelli, Marta Balli and Paolo Bonanni http://dx.doi.org/10.4161/hv.26036

Research Paper

<u>Willingness to receive a hypothetical avian influenza vaccine among US military personnel in mid-deployment</u>

Chad K Porter, Gina Fitamaurice, David R Tribble, Adam W Armstrong, Manal Mostafa and Mark S Riddle

http://dx.doi.org/10.4161/hv.25910

Research Paper

<u>Impact of a physician recommendation and parental immunization attitudes on receipt or intention to receive adolescent vaccines</u>

Lisa M Gargano, Natasha L Herbert, Julia E Painter, Jessica M Sales, Christopher Morfaw, Kimberly Rask, Dennis Murray, Ralph J DiClemente and James M Hughes http://dx.doi.org/10.4161/hv.25823

Review

An overview of current and potential use of information and communication technologies for immunization promotion among adolescents

Daniela Amicizia, Alexander Domnich, Roberto Gasparini, Nicola Luigi Bragazzi, Piero Luigi Lai and Donatella Panatto

http://dx.doi.org/10.4161/hv.26010

Review

Epidemiology of vaccine hesitancy in the United States

Mariam Siddiqui, Daniel A Salmon and Saad B Omer

http://dx.doi.org/10.4161/hv.27243

Review

Sources of HPV vaccine hesitancy in parents

Pooja R Patel and Abbey B Berenson http://dx.doi.org/10.4161/hv.26224

Commentary

Practical approaches to vaccine hesitancy issues in the United States: 2013

Joseph B Domachowske and Manika Suryadevara

http://dx.doi.org/10.4161/hv.26783

Commentary

Vaccine acceptance: The UK perspective

John A Ford, Hamid Mahgoub and Ananda Giri Shankar http://dx.doi.org/10.4161/hv.26411

Commentary

<u>Provider dismissal of vaccine-hesitant families: Misguided policy that fails to benefit</u> children

Douglas S Diekema

http://dx.doi.org/10.4161/hv.26284

Commentary

"Model" patients and the consequences of provider responses to vaccine hesitancy

Jason L Schwartz

http://dx.doi.org/10.4161/hv.26371

Commentary

<u>Liberty has its responsibilities: Holding non-vaccinators liable for the harm they do</u>

Arthur Caplan

http://dx.doi.org/10.4161/hv.26252

Commentary

Why money will not cure under-immunization

John D Lantos

http://dx.doi.org/10.4161/hv.26467

Commentary

What you see is what you fear

Robert I Field

http://dx.doi.org/10.4161/hv.26653

Commentary

Rethinking vaccine policy making in an era of vaccine hesitancy: Time to rebuild, not remodel?

Douglas J Opel and Edgar K Marcuse http://dx.doi.org/10.4161/hv.26651

Commentary

Making vaccine refusal less of a free ride

Alison M Buttenheim and David A Asch http://dx.doi.org/10.4161/hv.26676

Infectious Agents and Cancer

http://www.infectagentscancer.com/content
[Accessed 7 December 2013]
[No new relevant content]

Infectious Diseases of Poverty

http://www.idpjournal.com/content [Accessed 7 December 2013] [No new relevant content]

International Journal of Epidemiology

Volume 42 Issue 5 October 2013
http://ije.oxfordjournals.org/content/current
[No relevant content]

International Journal of Infectious Diseases

Vol 17 | No. 12 | December 2013 http://www.ijidonline.com/current [No relevant content]

JAMA

December 4, 2013, Vol 310, No. 21 http://jama.jamanetwork.com/issue.aspx
[No relevant content]

JAMA Pediatrics

Jason L. Schwartz, PhD, MBE1

December 2013, Vol 167, No. 12 http://archpedi.jamanetwork.com/issue.aspx

Viewpoint | December 2013 Rotavirus Vaccines, Intussusception, and Risk-Benefit Assessments JAMA Pediatr. 2013;167(12):1093-1094. doi:10.1001/jamapediatrics.2013.3771. http://archpedi.jamanetwork.com/article.aspx?articleid=1748358 Excerpt

Vaccination programs against rotavirus have the potential to dramatically improve the health of children worldwide. Two licensed rotavirus vaccines currently in use have been shown to be highly effective in reducing the burden and consequences of rotavirus-related disease. 1 Recently, a third vaccine in late-stage development in India has shown positive results in a large clinical trial. Its approval would provide another option for global rotavirus vaccination efforts, one likely to be more affordable to developing nations where the vast majority of the approximately 500 000 annual deaths attributable to rotavirus occur...

Editorial | December 2013

Delaying Vaccination Is Not a Safer Choice

Kristen A. Feemster, MD, MPH, MSHPR1,2; Paul Offit, MD1,2 JAMA Pediatr. 2013;167(12):1097-1098. doi:10.1001/jamapediatrics.2013.3071. http://archpedi.jamanetwork.com/article.aspx?articleid=1750202 Excerpt

According to a recent study of surveillance data from the Vaccine Safety Datalink published in this journal, 48.7% of children were undervaccinated at some time prior to their second birthday and 1 in 8 were undervaccinated owing to parental choice to delay or refuse certain vaccines. Undervaccination has been attributed to access to health care services and missed opportunities. Now, however, it has become increasingly evident that it is the result of vaccine hesitancy as parents question the need for certain vaccines and request alternate schedules...

Effect of Age on the Risk of Fever and Seizures Following Immunization With Measles-Containing Vaccines in Children

Ali Rowhani-Rahbar, MD, MPH, PhD1; Bruce Fireman, MA1; Edwin Lewis, MPH1; James Nordin, MD, MPH2; Allison Naleway, PhD3; Steven J. Jacobsen, MD, PhD4; Lisa A. Jackson, MD, MPH5; Alison Tse, ScD6; Edward A. Belongia, MD7; Simon J. Hambidge, MD, PhD8; Eric Weintraub, MPH9; Roger Baxter, MD1; Nicola P. Klein, MD, PhD1 JAMA Pediatr. 2013;167(12):1111-1117. doi:10.1001/jamapediatrics.2013.2745. http://archpedi.jamanetwork.com/article.aspx?articleid=1750204

ABSTRACT

Importance

The first dose of live attenuated measles-containing vaccines is associated with an increased risk of febrile seizures 7 to 10 days following immunization among 12- to 23-month-old children. The combination measles, mumps, rubella, and varicella vaccine is associated with a 2-fold increased risk of febrile seizures 7 to 10 days following immunization compared with the separately administered measles, mumps, and rubella and varicella vaccines. It is unknown whether the magnitude of these increased risks depends on age at immunization. Objective

To examine the potential modifying effect of age on the risk of fever and seizures following immunization with measles-containing vaccines.

Design, Setting, and Participants

Retrospective cohort study at 8 Vaccine Safety Datalink sites of a total of 840 348 children 12 to 23 months of age who had received a measles-containing vaccine from 2001 through 2011. Exposures Any measles-containing vaccines and measles-containing vaccines by type. Main Outcomes and Measures

Fever and seizure events occurring during a 42-day postimmunization observation period.

Results In the analysis of any measles-containing vaccines, the increased risk of seizures during the 7- to 10-day risk interval, using the remainder of the observation period as the control interval, was significantly greater among older children (relative risk, 6.5; 95% CI, 5.3-8.1; attributable risk, 9.5 excess cases per 10 000 doses; 95% CI, 7.6-11.5) than among younger children (relative risk, 3.4; 95% CI, 3.0-3.9; attributable risk = 4.0 excess cases per 10 000 doses; 95% CI, 3.4-4.6). The relative risk of postimmunization fever was significantly greater among older children than among younger children; however, its attributable risk was not. In the analysis of vaccine type, measles, mumps, rubella, and varicella vaccine was associated with a 1.4-fold increase in the risk of fever and 2-fold increase in the risk of seizures compared with measles, mumps, and rubella vaccine administered with or without varicella vaccine in both younger and older children.

Conclusions and Relevance

Measles-containing vaccines are associated with a lower increased risk of seizures when administered at 12 to 15 months of age. Findings of this study that focused on safety outcomes highlight the importance of timely immunization of children with the first dose of measles-containing vaccines.

Journal of Community Health

Volume 38, Issue 6, December 2013 http://link.springer.com/journal/10900/38/6/page/1 [Reviewed earlier]

Journal of Health Organization and Management

Volume 27 issue 6 - Latest Issue http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest [No relevant content]

Journal of Infectious Diseases

Volume 208 Issue 12 December 15, 2013 http://jid.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Global Ethics

<u>Volume 9</u>, Issue 3, 2013 <u>http://www.tandfonline.com/toc/rjge20/current#.UqNh2OKy_Kc</u> [No relevant content]

Journal of Global Infectious Diseases (JGID)

October-December 2013 Volume 5 | Issue 4 Page Nos. 125-186 http://www.jgid.org/currentissue.asp?sabs=n [No relevant content]

Journal of Medical Ethics

December 2013, Volume 39, Issue 1 http://jme.bmj.com/content/current [Reviewed earlier]

Journal of Medical Microbiology

December 2013; 62 (Pt 12)
http://jmm.sgmjournals.org/content/current
[No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 2 Issue 3 September 2013 http://jpids.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Pediatrics

Vol 163 | No. 6 | December 2013 | Pages 1537-1798 http://www.jpeds.com/current [No relevant content]

Journal of Public Health Policy

Volume 34, Issue 4 (November 2013) http://www.palgrave-journals.com/jphp/journal/v34/n4/index.html [Reviewed earlier]

Journal of the Royal Society - Interface

February 6, 2014; 11 (91)
http://rsif.royalsocietypublishing.org/content/current
[Reviewed earlier; No relevant content]

Journal of Virology

<u>December 2013, volume 87, issue 23</u> <u>http://jvi.asm.org/content/current</u> [Reviewed earlier; No relevant content]

The Lancet

Dec 07, 2013 Volume 382 Number 9908 p1857 – 1956 e33 - 40 http://www.thelancet.com/journals/lancet/issue/current

Editorial

The global crisis of severe acute malnutrition in children

The Lancet

Preview I

19 million children younger than 5 years had severe acute malnutrition (SAM) worldwide in 2011, most of whom lived in Africa and southeast Asia. Furthermore, more than 7% of all deaths in this age group were attributable to this disorder. These shocking numbers—calculated as part of the 2013 Lancet Series on Maternal and Child Nutrition—highlight how seriously the global problem of SAM should be taken. Therefore, the newly released WHO guidelines for the management of SAM in young children, to replace those produced in 1999, should be welcomed as a step in the right direction.

Comment

Investing in health: why, what, and three reflections

Richard Horton, Selina Lo

Preview I

When Dean Jamison proposed in 2012 that he and Lawrence Summers should reprise their work on investing in health—their 1993 World Development Report (WDR)1 remains the only World Bank annual publication dedicated to health—it seemed a huge and daunting task. WDR 1993, as it came to be known, is surrounded in global health mythology. For some, it was a milestone in making the case for health to heads of state and finance ministers. For others, it opened the door to private sector colonisation of health care, a door that, once opened, could never be closed again.

Reinvesting in health post-2015

Hillevi Engström, Pe Thet Khin, Awa Coll-Seck, Rasmus Helveg Petersen, Anarfi Asamoa-Baah, Graça Machel, Richard Sezibera, Joy Phumaphi, Ariel Pablos-Mendes, Ursula Müller, Lambert Grijns, Jasmine Whitbread, Lola Dare, Ramanan Laxminarayan, John E Lange, Anders Nordström

Preview I

During the past few years we have jointly forged a strong case for health and its links to sustainable development in the post-2015 agenda, with an overarching goal that seeks to maximise health at all stages of life, and with universal health coverage and access as the key means to its achievement. We have acknowledged the need to accelerate progress on the current Millennium Development Goals; to broaden the agenda to encompass non-communicable diseases; and to give more prominence to sexual and reproductive health, with particular emphasis on the health of adolescents.

Time for even greater ambition in global health

Jim Yong Kim

Preview I

Every so often, significant global trends can be traced back to a source. The 1993 World Development Report (WDR)1 was such a catalyst in global health and development policy, demonstrating to finance ministers, economists, and philanthropists that health is an investment with positive economic returns—and not simply a drain on scarce resources. The report helped set the stage for a major scale-up of health investments at global, regional, and national levels.

Investing in health: progress but hard choices remain

Margaret Chan

Preview |

The world has changed radically since the World Development Report (WDR) Investing in Health1 was published 20 years ago, so it is valuable and timely to look ahead once again. The Lancet Commission's optimistic report on investing in health2 confirms my view that the best times for public health are still ahead of us.

Towards a more robust investment framework for health

Helen Clark

Preview

On the 20th anniversary of the 1993 World Development Report (WDR),1 the report of the Lancet Commission on Investing in Health reaffirms that investing in health is a strategic investment with enormous economic returns.2 In recognition of the intrinsic value of health, the Commission used a "full income" approach to demonstrate an even higher total return from health investments than previously calculated. Measuring economic and intrinsic values together clearly shows that investments in health are investments in human development—in enlarging people's choices, freedoms, and capabilities to lead lives they value.

A grand convergence and a historic opportunity

Mark Dybul

Preview

The 1993 World Development Report (WDR)1 was a landmark publication: it put health squarely on the radar as a mainstream development opportunity. WDR 1993 made the important linkage between health gains and economic development, and it did so with arguments, metrics, and an audience that would have a substantial impact on how the world's decision makers prioritised and financed health.

The Lancet Commissions

Global health 2035: a world converging within a generation

Dean T Jamison, Lawrence H Summers, George Alleyne, Kenneth J Arrow, Seth Berkley, Agnes Binagwaho, Flavia Bustreo, David Evans, Richard G A Feachem, Julio Frenk, Gargee Ghosh, Sue J Goldie, Yan Guo, Sanjeev Gupta, Richard Horton, Margaret E Kruk, Adel Mahmoud, Linah K Mohohlo, Mthuli Ncube, Ariel Pablos-Mendez, K Srinath Reddy, Helen Saxenian, Agnes Soucat, Karene H Ulltveit-Moe, Gavin Yamey

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2813%2962105-4/fulltext Executive summary

Prompted by the 20th anniversary of the 1993 World Development Report, a Lancet Commission revisited the case for investment in health and developed a new investment framework to achieve dramatic health gains by 2035. Our report has four key messages, each accompanied by opportunities for action by national governments of low-income and middle-income countries and by the international community.

The Lancet Global Health

Dec 2013 Volume 1 Number 6 e310 - 379 http://www.thelancet.com/journals/langlo/issue/current [Reviewed earlier]

The Lancet Infectious Diseases

Dec 2013 Volume 13 Number 12 p995 - 1098 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

Medical Decision Making (MDM)

November 2013; 33 (8)

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

[Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy
September 2013 Volume 91, Issue 3 Pages 419–65
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue
[Reviewed earlier; No relevant content]

Nature

Volume 504 Number 7478 pp7-182 5 December 2013 http://www.nature.com/nature/current_issue.html [No relevant content]

Nature Immunology

December 2013, Volume 14 No 12 pp1199-1304 http://www.nature.com/ni/journal/v14/n12/index.html [Reviewed earlier; No relevant content]

Nature Medicine

Abstract

December 2013, Volume 19 No 12 pp1547-1673 http://www.nature.com/nm/journal/v19/n12/index.html **Key roles of adjuvants in modern vaccines**Steven G Reed, Mark T Orr & Christopher B Fox
http://www.nature.com/nm/journal/v19/n12/abs/nm.3409.html

Vaccines containing novel adjuvant formulations are increasingly reaching advanced development and licensing stages, providing new tools to fill previously unmet clinical needs. However, many adjuvants fail during product development owing to factors such as manufacturability, stability, lack of effectiveness, unacceptable levels of tolerability or safety concerns. This Review outlines the potential benefits of adjuvants in current and future vaccines and describes the importance of formulation and mechanisms of action of adjuvants. Moreover, we emphasize safety considerations and other crucial aspects in the clinical development of effective adjuvants that will help facilitate effective next-generation vaccines against

Nature Reviews Immunology

devastating infectious diseases.

December 2013 Vol 13 No 12 http://www.nature.com/nri/journal/v13/n12/index.html [No relevant content]

New England Journal of Medicine

December 5, 2013 Vol. 369 No. 23

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

Review Article Global Health

Global Maternal, Newborn, and Child Health — So Near and Yet So Far

Zulfiqar A. Bhutta, M.B., B.S., Ph.D., and Robert E. Black, M.D.

N Engl J Med 2013; 369:2226-2235<u>December 5, 2013</u>DOI: 10.1056/NEJMra1111853 *Excerpt* [Free full text] http://www.nejm.org/doi/full/10.1056/NEJMra1111853

...Recent assessment of global statistics suggests that despite major gains, among the 75 so-called Countdown countries that have 98% of all maternal deaths and deaths among children younger than 5 years of age, only 17 are on track to reach the MDG 4 target for child mortality and only 9 are on track to reach the MDG 5 target for maternal mortality. However, estimates from the Institute for Health Metrics and Evaluation suggest that 31 countries will achieve MDG 4, 13 countries will achieve MDG 5, and only 9 countries will achieve both targets. As we celebrate the fact that the annual number of deaths among children younger than 5 years of age has fallen to 6.6 million (uncertainty range, 6.3 to 7.0 million), which is a 48% reduction from the 12.6 million deaths (uncertainty range, 12.4 to 12.9 million) in 1990, despite an increased number of births in many high-burden countries during the same time period, the sobering realization is that even in countries that will reach their MDG 4 and 5 targets, many will still have high numbers of deaths, with much scope for improvement....

...Clearly, countries need to tackle multiple priorities, and many countries struggle with the growing demands for addressing the increasing burden of noncommunicable diseases as well as the challenges of maternal, newborn, and child health and infectious disease. Thus, there are enormous challenges regarding integration into generally fragmented health systems. The integration of new maternal and child health interventions with existing programs for maternal, newborn, and child health has been limited and has occurred only relatively recently at a global policy level. The situation is much worse with regard to integration across other, disease-specific programs and the management of various diseases. This lack of integration is most notable in large-scale vertical programs such as those addressing initiatives in HIV infection, AIDS, tuberculosis, and malaria, which have largely failed to link up with essential interventions for maternal, newborn, and child health and nutrition.

...Although the focus during the past decade has been on the saving of lives, it is also important to look beyond survival to issues of reducing morbidity and disability and improving long-term outcomes of relevance to human development. The close links among poverty, inequity, undernutrition, and human deprivation are well known, and all these factors have been shown to reduce the potential for human development considerably. 43 There are promising interventions that can benefit survival as well as human development, 44,45 and there is a huge public health need to integrate the two issues. Linking the agenda for maternal and child health and nutrition with the emerging issues of long-term development, human capital, and economic growth may well be the most appropriate strategy to ensure that we stay the course in solving one of the most important moral dilemmas of our times. Although the MDG target dates are in 2015, the need to keep a sustained focus on maternal and child health will remain.

OMICS: A Journal of Integrative Biology

December 2013, 17(12): http://online.liebertpub.com/toc/omi/17/12
[No relevant content]

The Pediatric Infectious Disease Journal

December 2013 - Volume 32 - Issue 12 pp: 1303-1404,e426-e477

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

[Reviewed earlier; No relevant content]

Pediatrics

December 2013, VOLUME 132 / ISSUE 6

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

Article

The Architecture of Provider-Parent Vaccine Discussions at Health Supervision Visits

<u>Douglas J. Opel, MD, MPHa,b,c, John Heritage, PhDd, James A. Taylor, MDa, Rita Mangione-Smith, MD, MPHa,c, Halle Showalter Salas, MPhilc, Victoria DeVere, BSc, Chuan Zhou, PhDa,c, and Jeffrey D. Robinson, PhDe</u>

http://pediatrics.aappublications.org/content/132/6/1037.abstract

Abstract

OBJECTIVE: To characterize provider-parent vaccine communication and determine the influence of specific provider communication practices on parent resistance to vaccine recommendations.

METHODS: We conducted a cross-sectional observational study in which we videotaped provider-parent vaccine discussions during health supervision visits. Parents of children aged 1 to 19 months old were screened by using the Parent Attitudes about Childhood Vaccines survey. We oversampled vaccine-hesitant parents (VHPs), defined as a score ≥50. We developed a coding scheme of 15 communication practices and applied it to all visits. We used multivariate logistic regression to explore the association between provider communication practices and parent resistance to vaccines, controlling for parental hesitancy status and demographic and visit characteristics.

RESULTS: We analyzed 111 vaccine discussions involving 16 providers from 9 practices; 50% included VHPs. Most providers (74%) initiated vaccine recommendations with presumptive (eg, "Well, we have to do some shots") rather than participatory (eg, "What do you want to do about shots?") formats. Among parents who voiced resistance to provider initiation (41%), significantly more were VHPs than non-VHPs. Parents had significantly higher odds of resisting vaccine recommendations if the provider used a participatory rather than a presumptive initiation format (adjusted odds ratio: 17.5; 95% confidence interval: 1.2-253.5). When parents resisted, 50% of providers pursued their original recommendations (eg, "He really needs these shots"), and 47% of initially resistant parents subsequently accepted recommendations when they did.

CONCLUSIONS: How providers initiate and pursue vaccine recommendations is associated with parental vaccine acceptance.

Pharmaceutics

Volume 5, Issue 3 (September 2013), Pages 371http://www.mdpi.com/1999-4923/5/3

[No new relevant content]

Pharmacoeconomics

Volume 31, Issue 11, November 2013 http://link.springer.com/journal/40273/31/11/page/1 [No relevant content]

PLoS One

[Accessed 7 December 2013] http://www.plosone.org/
[No new relevant content]

PLoS Medicine

(Accessed 7 December 2013) http://www.plosmedicine.org/
[No new relevant content]

PLoS Neglected Tropical Diseases

November 2013 http://www.plosntds.org/article/browseIssue.action [Reviewed earlier]

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

(Accessed 7 December 2013)
http://www.pnas.org/content/early/recent
[No new relevant content]

Pneumonia

Vol 2 (2013)

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

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

[Reviewed earlier]

Public Health Ethics

Volume 6 Issue 3 November 2013 http://phe.oxfordjournals.org/content/current [Reviewed earlier]

Qualitative Health Research

December 2013; 23 (12)

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

[No relevant content]

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

October 2013 Vol. 34, No. 4

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

[No relevant content]

Risk Analysis

December 2013 Volume 33, Issue 12 Pages 2079–2224

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

Perspective

On How to Deal with Deep Uncertainties in a Risk Assessment and Management Context

Terje Aven*

http://onlinelibrary.wiley.com/doi/10.1111/risa.12067/abstract

Abstract

Recently, several authors have presented interesting contributions on how to meet deep or severe uncertainties in a risk analysis setting. In this article, we provide some reflections on some of the foundational pillars that this work is based on, including the meaning of concepts such as deep uncertainty, known probabilities, and correct models, the aim being to contribute to a strengthening of the scientific platform of the work, as well as providing new insights on how to best implement management policies meeting these uncertainties. We also provide perspectives on the boundaries and limitations of analytical approaches for supporting decision making in cases of deep uncertainties. A main conclusion of the article is that deep uncertainties call for managerial review and judgment that sees beyond the analytical frameworks studied in risk assessment and risk management contexts, including those now often suggested to be used, such as robust optimization techniques. This managerial review and judgment should be seen as a basic element of the risk management.

Science

6 December 2013 vol 342, issue 6163, pages 1133-1280

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

Essays on Science and Society

Science & SciLifeLab Prize

From Persistence to Cross-Species Emergence of a Viral Zoonosis

Daniel G. Streicker

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Institute of Biodiversity, Animal Health, and Comparative Medicine, University of Glasgow, Glasgow, G12 8QQ, Scotland, UK.

http://www.sciencemag.org/content/342/6163/1185.summary

Summary

Emerging infectious diseases threaten all forms of life on Earth. Many pathogens of great historical and contemporary significance have originated from other species, triggering pandemics, disrupting agriculture, and challenging efforts to conserve endangered wildlife. Despite decades of research on species-jumping pathogens, the most central questions in the field remain major stumbling blocks for societies that seek to mitigate their impacts. These questions include which pathogens are most likely to emerge, which hosts are most likely to share pathogens, and what will be the long-term fate of newly emerged pathogens? Part of the challenge is that emergence, by nature, transcends scientific disciplines, occurring as the product of human behavior, environmental change, population, cellular and molecular biology, and evolution. Solutions therefore demand innovative pairing of theory and fundamental science with applied research and evidence-based policy-making

Science Translational Medicine

4 December 2013 vol 5, issue 214 http://stm.sciencemag.org/content/current [No relevant content]

Social Science & Medicine

Volume 100, <u>In Progress</u> (January 2014) http://www.sciencedirect.com/science/journal/02779536/100 [No new relevant content]

UN Chronicle

Vol. L No. 3 2013 September 2013

http://unchronicle.un.org/ **Theme: Migration**

This issue, which features contributions from twelve leading experts from within and outside of the United Nations system, looks at international migration and development. The articles examine, among other things, lowering the costs and amplifying the benefits of migration; the protection of migrants' rights and State sovereignty; labour migration and inclusive development; leveraging remittances for development; the reintegration of returning migrants; and strengthening migration cooperation.

Vaccine

Volume 31, Issue 52, Pages 6161-6266 (16 December 2013) http://www.sciencedirect.com/science/journal/0264410X [Reviewed earlier]

Vaccine: Development and Therapy

(Accessed 7 December 2013)

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

[No new relevant content]

Vaccines — Open Access Journal

(Accessed 7 December 2013)

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

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

[No new relevant content]

Value in Health

Vol 16 | No. 7 | November 2013 http://www.valueinhealthjournal.com/current [Reviewed earlier; No relevant content]

<u>From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary</u>

Book: *Immunology of Aging*

Editors: Ahmad Massoud, Nima Rezaei

ISBN: 978-3-642-39494-2 (Print) 978-3-642-39495-9 (Online) http://link.springer.com/book/10.1007/978-3-642-39495-9

:: Chapter: An Introduction on the Old Age and the Aging of the Immune System

Mohamad Bagher Eslami PhD

Abstract

The immune system is vital for the well-being and general health of all individuals, especially elderly, while like other systems it undergoes several changes during aging. Aging influence not only the renewal potential of this system but also the elements of the cytokine network essential for communication between its different parts. It is therefore very necessary to acquire more knowledge on the effects of aging on this highly complex system. Although, there is a growing body of literature on this field, there are far more controversial and unresolved subjects in need of further research. The well-being, health of the old people, and possible restoration of the potential of this system rely largely on the valuable knowledge remained to be gained by further research on this subject

:: Chapter: Optimizing Response to Vaccination in the Elderly

D Boraschi, R Rappuoli, G Del

Abstract

The elderly population is generally "immunologically frail" and more susceptible to infectious diseases, making the need of preventive treatments (vaccination) a public health issue. However, normal vaccines that are effective in young and adult individuals are less immunogenic and less protective in the elderly, due to their impaired immune responsiveness. It is therefore necessary to design new vaccines especially suited to raise protective immunity in the elderly population. Among the several approaches recently undertaken in this direction, the case of influenza vaccination is exemplary and can be taken as paradigm of how a vaccine for the elderly is designed and developed. The approach includes higher antigen dosage, repeated

challenges, different immunization routes, and use of strong adjuvants. Basically, a better knowledge of the anomalous immune responsiveness in the elderly remains the unrenounceable basis on which effective immunization strategies in immunologically frail populations should be based.

<u>Oral polio vaccine plus inactivated polio vaccine versus oral polio vaccine alone for reducing polio in children under two years of age</u>

F Jehan, MI Nisar, ZS Lassi, SB Omer, AKM Zaidi - The Cochrane Library, 2013 Abstract

This is the protocol for a review and there is no abstract. The objectives are as follows:

- :: To determine the effects of combined immunisation with OPV and IPV on intestinal mucosal immunity
- :: To determine any variation in effect with type of vaccine, number of doses, age at first dose, by human immunodeficiency virus (HIV) status or in high and low income countries
- :: To determine any serious adverse outcomes

Med Sci (Paris). 2013 Nov;29(11):1034-41. doi: 10.1051/medsci/20132911021. Epub 2013 Nov 20.

[Eradication of poliomyelitis and emergence of pathogenic vaccine-derived polioviruses: from Madagascar to Cameroon].

[Article in French]

<u>Delpeyroux F, Colbère-Garapin F, Razafindratsimandresy R, Sadeuh-Mba S, Joffret ML, Rousset D, Blondel B.</u>

Source: Institut Pasteur, biologie des virus entériques, Inserm U994, 25, rue du Docteur Roux, 75724 Paris Cedex 15, France.

Abstract

The oral polio vaccine, a live vaccine made of attenuated poliovirus strains, is the main tool of the vaccination campaigns organised for eradicating poliomyelitis, these campaigns had led to the decline and, thereafter, to the disappearance of wild poliovirus strains of the three serotypes (1-3) in most parts of the world. However, when the polio vaccine coverage becomes too low, vaccine polioviruses can circulate in insufficiently immunized populations and become then pathogenic by mutations and genetic recombination with other enteroviruses of the same species, in particular some coxsackievirus A. These mutated and recombinant vaccine strains have been implicated in several epidemics of paralytic poliomyelitis. Two polio outbreaks associated with these pathogenic circulating vaccine-derived poliovirus (cVDPV) occurred in 2001-2002 and 2005 in the South of Madagascar where vaccine coverage was low. These cVDPV, of serotype 2 or 3, were isolated from paralyzed children and some of their healthy contacts. Other cVDPV were isolated in the same region from healthy children in 2011, indicating that these viruses were circulating again. Vaccination campaigns could stop the outbreaks in 2002 and 2005, and most probably prevent another one in 2011. Therefore, the genetic plasticity of polio vaccine strains that threatens the benefit of vaccination campaigns is the target of an accurate surveillance and an important theme of studies in the virology laboratories of the Institut Pasteur international network.

<u>Critical Research Concepts in TB Vaccine Development</u>

G Delogu, R Manganelli, MJ Brennan - Clinical Microbiology and Infection, 2013

Abstract A new and improved vaccine against tuberculosis (TB) would provide a powerful tool to conquer one of the most insidious infectious diseases of mankind. Protection afforded by Bacille Calmette-Guerin (BCG) has been shown to be limited and inconsistent...

Thesis: Designing and evaluating a health belief model based intervention to increase intent of HPV vaccination among college men: Use of qualitative and quantitative methodology

Mehta, Purvi

Year and Degree: 2013, PhD, University of Cincinnati, Education, Criminal Justice, and Human

Services: Health Education.

https://etd.ohiolink.edu/ap:10:0::NO:10:P10_ACCESSION_NUM:ucin1368014093

Abstract

Humanpapilloma virus (HPV) is a common sexually transmitted disease/infection (STD/STI), leading to cervical and anal cancers. Annually, 6.2 million people are newly diagnosed with HPV and 20 million currently are diagnosed. According to the Centers for Disease Control and Prevention, 51.1% of men carry multiple strains of HPV. Recently, HPV vaccine was approved for use in boys and young men to help reduce the number of HPV cases. Currently limited research is available on HPV and HPV vaccination in men. The purpose of the study was to determine predictors of HPV vaccine acceptability among college men through the qualitative approach of focus groups and to develop an intervention to increase intent to seek vaccination in the target population

The study took place in two phases. During Phase I, six focus groups were conducted with 50 participants. In Phase II using a randomized controlled trial a HBM based intervention was compared with a traditional knowledge based intervention in 90 college men. In Phase I lack of perceived susceptibility, perceived severity of HPV and barriers towards taking the HPV vaccine were major themes identified from the focus groups. Participants for this phase and phase II were primarily single, heterosexual, about 20 years old, Caucasian males attending the University of Cincinnati. Phase II analysis was done for pretest/posttest and for pretest/posttest/follow-up. This was done due to a 17.8% retention rate at follow-up. Repeated measures of ANOVA indicated significant positive changes in the intervention group. Scores for knowledge and HBM constructs, perceived severity, perceived susceptibility, perceived benefits, perceived barriers, self-efficacy, and cues to action improved over time while no significant findings were made for the control group. Regression analysis was done for change scores at pretest/posttest, follow-up/pretest, and follow-up/posttest. No significant model was found for follow-up/posttest. Results from the pretest/posttest regression analysis indicated self-efficacy for taking the vaccine (p=0.000), perceived barriers (p=0.007), and perceived severity (p=0.004) were significant positive predictors of vaccine acceptability. The model had an adjusted R2 of 0.351which indicated that these three predictors accounted for 35.1% variance. HBM is a robust model to predict HPV vaccine acceptability in college men. Results from follow-up/pretest found perceived benefits (p=.004) held a significant positive relationship towards intent to vaccinate. The model had an adjusted R2 of 0.453, which indicated this predictor accounted for 45.3% variance regarding whether participants would take the vaccine.

Overall, the intervention proved to be effective in creating positive change towards HPV vaccine acceptability. Some limitations had occurred, such as a low retention rate at follow-up, and differences between groups at baseline. Despite these issues, change in the intervention still occurred. This study indicates that more theory-based interventions are needed to increase HPV vaccination in college men.

Media/Policy Watch

This section is intended to alert readers to substantive news, analysis and opinion from the general media on vaccines, immunization, global; public health and related themes. *Media Watch* is not intended to be exhaustive, but indicative of themes and issues CVEP is actively tracking. This section will grow from an initial base of newspapers, magazines and blog sources, and is segregated from *Journal Watch* above which scans the peer-reviewed journal ecology.

We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where content is published without restriction, but most publications require registration and some subscription level.

Al Jazeera

http://www.aljazeera.com/Services/Search/?q=vaccine
Accessed 7 December 2013
[No new, unique, relevant content]

The Atlantic

http://www.theatlantic.com/magazine/
Accessed 7 December 2013
[No new, unique, relevant content]

BBC

http://www.bbc.co.uk/ Accessed 7 December 2013 [No new, unique, relevant content]

Brookings

http://www.brookings.edu/ Accessed 7 December 2013 [No new, unique, relevant content]

Council on Foreign Relations

http://www.cfr.org/ Accessed 7 December 2013 [No new, unique, relevant content]

Economist

http://www.economist.com/ Accessed 7 December 2013 [No new, unique, relevant content]

Financial Times

http://www.ft.com

Accessed 7 December 2013

[No new, unique, relevant content]

Forbes

http://www.forbes.com/

Accessed 7 December 2013

Pharma & Healthcare

12/04/2013 @ 6:40PM

Katie Couric Promotes Anticancer Vaccine Alarmism

Yesterday, <u>Katie Couric</u>, who evidently has slipped out of her role as journalist and into a role as a television personality, tweeted the following:

V interesting debate going on re: Wed's ep on HPV vaccine controversy! We're hoping to tell both sides so parents can make informed decision...

http://www.forbes.com/sites/emilywillingham/2013/12/04/katie-couric-promotes-anticancer-vaccine-alarmism/

Foreign Affairs

http://www.foreignaffairs.com/

Accessed 7 December 2013

[No new, unique, relevant content]

Foreign Policy

http://www.foreignpolicy.com/

Accessed 7 December 2013

[No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/

Accessed 7 December 2013

[No new, unique, relevant content]

The Huffington Post

http://www.huffingtonpost.com/

Accessed 7 December 2013

[No new, unique, relevant content]

Le Monde

http://www.lemonde.fr/

Accessed 7 December 2013

[No new, unique, relevant content]

New Yorker

http://www.newyorker.com/

Accessed 7 December 2013

[No new, unique, relevant content]

New York Times

http://www.nytimes.com/

Accessed 7 December 2013

[No new, unique, relevant content]

Reuters

http://www.reuters.com/ Accessed 7 December 2013 [No new, unique, relevant content]

Wall Street Journal

http://online.wsj.com/home-page Accessed 7 December 2013 [No new, unique, relevant content]

Washington Post

http://www.washingtonpost.com/
Accessed 7 December 2013
[No new, unique, relevant content]

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