Vaccines: The Week in Review
12 March 2012
Center for Vaccine Ethics & Policy (CVEP)

This weekly summary targets news, announcements and events in global vaccines ethics and policy gathered from key governmental, NGO and industry sources, key journals and other sources. This summary supports ongoing initiatives of the Center for Vaccine Ethics & Policy, and is not intended to be exhaustive in its coverage. Vaccines: The Week in Review is also posted in pdf form and as a set of blog posts at http://centerforvaccineethicsandpolicy.wordpress.com/. This blog allows full-text searching of some 2,500 entries..

Comments and suggestions should be directed to
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Executive Director
Center for Vaccine Ethics & Policy
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Editor's Notes:

- *Please forward this issue to colleagues and others who may benefit: we are happy to add to our distribution list.*
- *Email delivery is now managed by the Constant Contact app to allow more consistent delivery and better management of the growing volume of recipients. Please advise me of any issues you may encounter.*
- *Readers can also follow developments on twitter: @vaxethicspolicy*
- *A pdf version of this issue is available here: http://centerforvaccineethicsandpolicy.wordpress.com/*

The Global Fund said an announcement by Germany of a EUR50 million contribution "was a clear endorsement of new measures to improve financial oversight and management." Last year, Germany suspended contributions to the Global Fund, but now has made the first quarterly payment of a EUR200 million contribution this year and "was confident that (it) would make all its payments this year if the pace of reform is maintained." Global Fund General Manager Gabriel Jaramillo commented, "We are committed to do even better what we already do best, which is to save lives. We want to assure…that German taxpayer money is being handled effectively to achieve the best possible results." Germany is described as the fourth largest donor to the Global Fund, having pledged over EUR1.5 billion since 2002. This includes EUR 600 million for the period 2011-13, in yearly installments of EUR 200 million each. The Global Fund media release noted that "In his first month at the Global Fund, Mr. Jaramillo has streamlined its organizational structure and sharpened the focus on grant management in countries with the highest burden of disease..." http://www.theglobalfund.org/en/mediacenter/pressreleases/2012-03-08_Global_Fund_Sees_Germanys_Contribution_as_Recognition_of_New_Direction/

The International Vaccine Institute (IVI) said it was recently issued two patents on shigellosis by the United States Patent and Trademark Office marking "a milestone in its aim to prevent and control dysentery (also commonly called shigellosis or bloody diarrhea), a deadly disease that affects several million people worldwide." The two patents "will accelerate the Institute's current efforts in developing an effective and low-cost vaccine for use among impoverished

communities afflicted by dysentery." IVI noted that the disease, caused by the bacterial pathogen Shigella, is a major health problem in developing countries, as young children are particularly vulnerable to the disease. Dr. Cecil Czerkinsky, IVI's Deputy Director-General of Laboratory Sciences, and Dr. Dong Wook Kim, Associate Professor at Hanyang University and former IVI scientist, reported the original discovery of the Shigella common protein antigens in a provisional patent application filed in October 2008. Dr. Czerkinsky commented, "We are extremely excited about the issuance of the Shigella vaccine patents. It further reinforces our belief that these common proteins, through their immunological properties, may be highly effective in preventing shigellosis, a diarrheal disease that claims countless lives of children every year, mainly in developing countries." Dr. Christian Loucq, IVIs Director-General, commented, "This patent issuance is an important milestone on IVI's path of delivering a new vaccine against another killer infectious disease. Furthermore, it underlies the dynamism and productivity of IVI scientists."
http://www.ivi.org/event_news/news_view.asp?enid=128

GSK announced a joint venture (JV with Daiichi Sankyo Co., Ltd. to form the largest vaccines company in Japan. The JV "will hold the development and commercial rights for already existing preventative vaccines from both parent companies (and) supply globally recommended vaccines to help protect people of all ages in Japan including Human Papillomavirus (HPV) vaccine, Rotavirus vaccine, Seasonal flu vaccine, Mumps vaccine, Diphtheria Pertussis (DTP) vaccine, and Measles Rubella (MR) vaccine." Both companies will sell their respective vaccines into the JV at agreed upon prices and will have an equal stake in the joint venture. Christophe Weber, President Designate of GlaxoSmithKline Vaccines, commented, "This collaboration marks another step in our strategy to build our presence in key growth markets and will create the first and largest company dedicated solely to vaccines in Japan. We are very pleased to be partnering with Daiichi Sankyo, a highly regarded company and an established leader in Japan. Both companies have strong track records in commercialisation and, in combination, will create further significant economies of scale in the development and distribution of vaccines in the Japanese market."

The **Weekly Epidemiological Record (WER) for 9 March 2012**, vol. 87, 10 (pp 81–96) includes: Global Polio Eradication Initiative: fifth meeting of the Independent Monitoring Board; Recommended composition of influenza virus vaccines for use in the 2012–2013 northern hemisphere influenza season.
http://www.who.int/entity/wer/2012/wer8710.pdf

WHO released a new issue of GIN - Global Immunization News 29 February 2012
http://www.who.int/entity/immunization/GIN_February_2012.pdf

Twitter Watch *[accessed 10 March 2012 15:05]*
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.

PAHO/WHO Equity @eqpaho
Inside the black box: modelling health care financing reform in data-poor contexts bit.ly/wAkquY
Retweeted by Amanda Glassman
8:06 PM - 9 Mar 12

Measles Initiative @MeaslesInit
Nepal's women health volunteers spread the word to every mountain wp.me/p1UXPA-6d
5:11 AM - 9 Mar 12

UN Foundation @unfoundation
RT @un_women: "I urge gov'ts, civil society & private sector to commit to empowerment of #women as fundamental #humanright"- #UN Sec-Gen #IWD
5:01 PM - 8 Mar 12

History of Vaccines @historyvaccines
An Anti-Vaccination Hymn? From the Anti-Vaccination Society of America, ca 1900 bit.ly/yC49Ar #vaxfax #vaccine #smallpox
10:59 AM - 8 Mar 12

PATH MVI @MalariaVaccine
More information about the Vaccine Formulation Center that opened in Pune, India: bit.ly/zJT5zF
3:05 PM - 7 Mar 12

Doctors w/o Borders @MSF_USA
Measles Takes its Toll in #Somalia bit.ly/A3qXnu MSF awaiting permission from authorities to conduct vaccination campaigns.
2:08 PM - 7 Mar 12

The Lancet @TheLancet
Recently established @CDCGlobal plans to build on @CDCgov 60-year history of evidence-based global health programmes awe.sm/5hAjX
1:31 PM - 7 Mar 12

Seth Berkley @GAVISeth
GAVI's HPV Vaccine program for LDCs was selected as one of the "Women Deliver 50" in Technologies and Innovations tinyurl.com/89p5dzk
10:22 AM - 7 Mar 12

Journal Watch

Vaccines: The Week in Review continues its weekly scanning of key journals to identify and cite articles, commentary and editorials, books reviews and other content supporting our focus on vaccine ethics and policy. ***Journal Watch*** **is not intended to be exhaustive, but indicative of themes and issues the Center is actively tracking.** We selectively provide full text of some editorial and comment articles that are specifically relevant to our work. Successful access to some of the links provided may require subscription or other access arrangement unique to the publisher. If you would like to suggest other journal titles to include in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

Annals of Internal Medicine

March 6, 2012; 156 (5)

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

[No relevant content]

British Medical Bulletin

Volume 101 Issue 1 March 2012

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

Articles

Mapping for economic evaluation

Ling-Hsiang Chuang and Sarah J. Whitehead

Br Med Bull (2012) 101(1): 1-15 doi:10.1093/bmb/ldr049

Abstract

Introduction/background Mapping provides a statistical algorithm that allows the estimation of utilities and consequently calculation of QALYs in clinical studies where preference-based measures are not implemented.

Sources of data Reviews of the mapping literature were utilized.

Areas of agreement Mapping requires similar populations between the estimation and study data sets, with a high degree of overlap between the target and base measures being desirable. The National Institute for Health and Clinical Excellence recognizes mapping as a method to provide utility information.

Areas of controversy Issues surrounding mapping include the descriptive system of the measure, the appropriate econometric method and model specification.

Growing points There is a need for further research into the issue of over-prediction for severe health states and uncertainty around the estimated utility scores.

Areas timely for developing research Mapping continues to be an important area of research for economic evaluation, in particular validation of mapping functions.

Is the QALY blind, deaf and dumb to equity? NICE's considerations over equity

M. O. Soares

Br Med Bull (2012) 101(1): 17-31 doi:10.1093/bmb/lds003

Abstract

Introduction/background

The quality-adjusted life year (QALY) is the preferred measure of health outcome used to inform decisions over the use of health care interventions in the UK NHS. This

measure considers the overall impact of alternative interventions on both the quantity and quality of life.
Sources of data
Review of the relevant literature.
Areas of agreement
The QALY assumes that health improvement is equally valued between individuals.
Areas of controversy
Some can perceive as equitable, that is fair, the assumption that health improvement is equally valued between individuals in the QALY. However, others may believe that this assumption leaves no space for alternative views over equity to be explicitly considered in societal decision making.
Growing points
The role of equity in decision making in the UK has been subject of intense debate, and controversy, and to-date there is no consensus on whether, or how, should NICE should change their general process.
Areas timely for developing research
Further examination of the issues needs to be debated and researched.

British Medical Journal
10 March 2012 (Vol 344, Issue 7847)
http://www.bmj.com/content/current
[No relevant content]

Cost Effectiveness and Resource Allocation
(Accessed 10 March 2012)
http://www.resource-allocation.com/
[No new relevant content]

Emerging Infectious Diseases
Volume 18, Number 3—March 2012
http://www.cdc.gov/ncidod/EID/index.htm
[Reviewed earlier; No relevant content]

Foreign Affairs
http://www.foreignaffairs.com/articles/137312/laurie-garrett/money-or-die?page=4
Money or Die: A Watershed Moment for Global Public Health
Laurie Garrett
March 6, 2012
Extract (first paragraphs)
Over the last three decades, public funding for global health organizations has dried up. Private companies are writing checks to fill the gap, and, accordingly, they are bending the agenda toward their interests. Realigning priorities, however, will mean getting more private firms involved, not less.

In relative terms, the funds required are not large. Combined charitable giving for all causes by individuals in the United States and the United Kingdom hit $300 billion in 2011, but the bulk of this giving goes to domestic issues, and what goes to foreign causes is often dominated by surges of support for relief efforts for shocking natural disasters. Total estimated expenditures worldwide on health care in 2010, meanwhile, hit $5.3 trillion, with U.S. domestic spending accounting for nearly half of that. Even at its recent peak, the amount of money spent on the health of the world's poorest people, who suffer most of humanity's infectious and preventable diseases, represented merely . 0005 percent of worldwide health spending.

Like it or not, the burden of reducing suffering and increasing the health of the world's poor now falls largely on the backs of the two Washingtons. The Gates Foundation is doing extraordinary work, but it operates without accountability or transparency and needs competition. Bill Gates has admitted as much himself in multiple interviews, acknowledging that his efforts wield an uncomfortably large amount of unchallenged power over global health. So far, Congress has spared global health drastic budget cuts, but the White House 2013 budget request signals that pressure for reductions is building. It would be a catastrophe were the "age of generosity" to end so soon after it began, leaving millions without life-sparing medicines and tools they have come to rely upon….

Global Health
Winter 2012
http://www.globalhealthmagazine.com/in_this_issue/
[Reviewed earlier]

Globalization and Health
[Accessed 10 March 2012]
http://www.globalizationandhealth.com/
[No new relevant content]

Health Affairs
March 2012; Volume 31, Issue 3
http://content.healthaffairs.org/content/current
[No relevant content]

Health and Human Rights
Vol 13, No 2 (2011)
http://hhrjournal.org/index.php/hhr
[Reviewed earlier]

Health Economics, Policy and Law
Volume 7 - Issue 02 - April 2012
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue

[Reviewed last week]

Health Policy and Planning
Volume 27 Issue 2 March 2012
http://heapol.oxfordjournals.org/content/current
[Reviewed last week]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 8, Issue 3 March 2012
http://www.landesbioscience.com/journals/vaccines/toc/volume/8/issue/3/
Book Review
History of Vaccine Development by Stanley A. Plotkin (Editor)
Volume 8, Issue 3 March 2012
Jose Esparza
This book (History of Vaccine Development, edited by Stanley Plotkin, Springer, 2011, 349 pages) collects the personal perspectives of selected scientists who were instrumental in the development of a number of current vaccines. The editor of this book, Stanley Plotkin, is an emeritus professor of the University of Pennsylvania and at the Wistar Institute. He developed the rubella vaccine and has worked extensively in the development and application of many other vaccines. The book originates from information discussed at a meeting convened by Dr. Plotkin in Paris in 1995 which, unfortunately, has not been widely disseminated until now. Some of the participants have passed away since the meeting was held and, as Dr. Plotkin indicates, that makes their account even more important for future generation of vaccinologists. There are so many lessons to be learned from those individuals who actually developed vaccines. As the Spanish-born philosopher, novelist, and poet George Santayana said, "Those who cannot remember the past are condemned to repeat it." But, perhaps more importantly, this book should also provide guidance and inspiration to future vaccinologists so that they can build on the successes of the past.
Review
The effect of social determinants on immunization programs
Volume 8, Issue 3 March 2012
Aharona Glatman-Freedman and Katherine Nichols
Abstract
Vaccine preventable diseases have been responsible for a significant portion of childhood mortality in low-income countries, and have been re-emerging in medium- and high-income countries. The effectiveness of routine childhood immunization programs relies on multiple factors. Social determinants have the potential to affect immunization programs around the world, with globalization and ease of communication facilitating their effect. Exploring the types of social determinants affecting immunization efforts in various countries is of great importance to the ability of nations to address them, prevent the spread of disease and lower mortality rates. The social determinants affecting vaccination programs can vary among countries of different income levels, with some social determinants overlapping among these country groups. In this article we explore the various social determinants affecting routine immunization programs in low-, middle- and high-income countries and possible interventions to address them.

Research Paper

Public health and economic benefits of new pediatric influenza vaccination programs in Argentina

Volume 8, Issue 3 March 2012

Norberto Giglio, Angela Gentile, Lydia Lees, Paula Micone, Judith Armoni, Camille Reygrobellet and Pascal Crepey

Abstract

Background:

Argentina's population was heavily affected by the 2009 influenza pandemic, particularly children, in whom incidence of seasonal influenza is consistently high. Following the pandemic, Argentinean national recommendations for pediatric vaccination against A/H1N1 influenza were defined for all children aged up to five years, in line with programs implemented by national authorities elsewhere. Economic evaluations have found that vaccination programs for this population against seasonal influenza are cost-effective, if not cost-saving in many countries. Recently, Argentina decided to routinely vaccinate against influenza children aged 6–23 mo-old. But, the economic value of such strategies for the country has never been assessed.

Methods:

A model was developed to assess the value of four different vaccination strategies: (1) no pediatric vaccination; (2) vaccination of 6–23 mo-old children; (3) vaccination of 6–36 mo-old children; (4) vaccination of 6 mo−5 y-old children. We first estimate community health benefits of vaccination then we evaluate the economic and quality-of-life impact of these strategies on the population. Data used in the model come from surveillance networks, published literature, national databases, and retrospective hospital-based data.

Results:

Pediatric influenza vaccination benefited not only children but also the overall community, due to decreased disease transmission. Our results showed that the recent decision by Argentina to vaccinate 6–23 mo-old children is cost-effective as would be the incremental vaccination of broader age groups.

Conclusions:

Results from this study are consistent with previous analyses in other countries confirming that implementing influenza pediatric vaccination programs can be highly cost-effective through individual- and community protection against the disease.

Commentary

Plant-derived vaccines: An approach for affordable vaccines against cervical cancer

Volume 8, Issue 3 March 2012

Mohammad Tahir Waheed, Johanna Gottschamel, Syed Waqas Hassan and Andreas Günter Lössl

Abstract

Several types of human papillomavirus (HPV) are causatively associated with cervical cancer, which is the second most common cancer in women worldwide. HPV-16 and 18 are among the high risk types and responsible for HPV infection in more than 70% of the cases. The majority of cervical cancer cases occur in developing countries. Currently available HPV vaccines are expensive and probably unaffordable for most women in low and middle income countries. Therefore, there is a need to develop cost-effective vaccines for these countries. Due to many advantages, plants offer an attractive

platform for the development of affordable vaccines. These include low cost of production, scalability, low health risks and the potential ability to be used as unprocessed or partially processed material. Among several techniques, chloroplast transformation is of eminent interest for the production of vaccines because of high yield of foreign protein and lack of transgene transmission through pollen. In this commentary, we focus on the most relevant aspects of plant-derived vaccines that are decisive for the future development of cost-effective HPV vaccines.

International Journal of Infectious Diseases
Volume 16, Issue 3 pp. e151-e224 (March 2012)
http://www.sciencedirect.com/science/journal/12019712
[Reviewed earlier]

JAMA
March 7, 2012, Vol 307, No. 9, pp 883-985
http://jama.ama-assn.org/current.dtl
[No relevant content]

Journal of Infectious Diseases
Volume 205 Issue 7 April 1, 2012
http://www.journals.uchicago.edu/toc/jid/current
EDITORIAL COMMENTARIES
Hazel M. Dockrell
Editor's Choice: A New Challenge for the Tuberculosis Vaccine Community?
J Infect Dis. (2012) 205(7): 1029-1031 doi:10.1093/infdis/jis016
Extract
The tuberculosis vaccine community has much to occupy it at this time. Two recombinant BCG vaccines currently in clinical trials are designed to improve the protection given by Mycobacterium bovis bacille Calmette-Guérin (BCG) and hoped to be safer in human immunodeficiency virus (HIV)–infected infants as are a number of novel vaccines designed to boost the immunity given by BCG (or an improved priming vaccine), including viral vectors expressing key antigens of M. tuberculosis and fusion proteins in adjuvant [1]. The pipeline of vaccines in phase I and phase II trials is supported by a number of promising vaccines in early-stage development. However, even in settings with the highest incidence of tuberculosis, large-scale and very costly trials will be needed to determine the efficacy of a new tuberculosis vaccine. The development of these vaccines is hampered by our current inability to identify biosignatures or correlates of protection that would be induced by a protective tuberculosis vaccine. This limitation has been identified as a roadblock by many in the field, including in the new Integrated Roadmap for Tuberculosis Research published by the Stop TB Partnership and the World Health Organization in November 2011 [2]. Minassian et al [3], in this issue of the Journal, reports a new approach that could lead to new insights, in which BCG vaccination has been used as a challenge.
In other fields, an infectious challenge has been used to test new vaccines, bypassing the need for correlates of protection (eg, for malaria using bites from infected

mosquitoes [4], influenza [attempted as far back as 1918 and successful in 1936] [5], diarrhea-inducing enterotoxigenic Escherichia coli [6], dengue [7], Campylobacter jejuni [8 …

MAJOR ARTICLES AND BRIEF REPORTS

BACTERIA

Angela M. Minassian, Iman Satti, Ian D. Poulton, Joel Meyer, Adrian V. S. Hill, and Helen McShane

Editor's Choice: A Human Challenge Model for Mycobacterium tuberculosis Using Mycobacterium bovis Bacille Calmette-Guérin

J Infect Dis. (2012) 205(7): 1035-1042 doi:10.1093/infdis/jis012

Abstract

(See the editorial commentary by Dockrell)

Background.

There is currently no safe human challenge model of Mycobacterium tuberculosis infection to enable proof-of-concept efficacy evaluation of candidate vaccines against tuberculosis. In vivo antimycobacterial immunity could be assessed using intradermal Mycobacterium bovis bacille Calmette-Guérin (BCG) vaccination as a surrogate for M. tuberculosis infection.

Methods.

Healthy BCG-naive and BCG-vaccinated volunteers were challenged with intradermal BCG. BCG load was quantified from skin biopsy specimens by polymerase chain reaction (PCR) and culture colony-forming units. Cellular infiltrate was isolated by suction blisters and examined by flow cytometry. Prechallenge immune readouts were correlated with BCG load after challenge.

Results.

In BCG-naive volunteers, live BCG was detected at the challenge site for up to 4 weeks and peaked at 2 weeks. Infiltration of mainly CD15+ neutrophils was observed in blister fluid. In previously BCG-vaccinated individuals, PCR analysis of skin biopsy specimens reflected a degree of mycobacterial immunity. There was no significant correlation between BCG load after challenge and mycobacterial-specific memory T cells measured before challenge by cultured enzyme-linked immunospot assay.

Conclusions.

This novel experimental human challenge model provides a platform for the identification of correlates of antimycobacterial immunity and will greatly facilitate the rational down-selection of candidate tuberculosis vaccines. Further evaluation of this model with BCG and new vaccine candidates is warranted.

The Lancet

Mar 10, 2012 Volume 379 Number 9819 p867 – 976 e34 - 35
http://www.thelancet.com/journals/lancet/issue/current

Perspectives

A history of eradication—successes, failures, and controversies

Donald A Henderson

Comment

The CDC's Center for Global Health

Thomas R Frieden, Kevin M De Cock

Published online March 7, 2012 DOI:10.1016/S0140-6736(12)60370-5

awe.sm/5hAjX

The Lancet Infectious Disease
Mar 2012 Volume 12 Number 3 p167 - 254
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Medical Decision Making (MDM)
January–February 2012; 32 (1)
http://mdm.sagepub.com/content/current
[Reviewed earlier]

Nature
Volume 483 Number 7388 pp123-238 8 March 2012
http://www.nature.com/nature/current_issue.html
[No relevant content]

Nature Medicine
March 2012, Volume 18 No 3 pp323-467
http://www.nature.com/nm/journal/v18/n3/index.html
Editorial
The persistence of polio
doi:10.1038/nm.2708
Despite intense efforts to rid the world of poliovirus, it continues to persevere. Given the serious limitations of the existing vaccines, the feasibility of eradication must be reassessed.
Opinion
Public-private partnerships need honest brokering
Michel Goldman
doi:10.1038/nm0312-341
Given the current challenges in research and development, it's increasingly apparent that collaboration between large pharmaceutical companies, academic teams and biotechnology enterprises is essential for converting basic biomedical discoveries into lifesaving medicines. But these partnerships work best when a neutral third party helps foster them.

Nature Reviews Immunology
March 2012 Vol 12 No 3
http://www.nature.com/nri/journal/v12/n3/index.html
[Reviewed earlier; No relevant content]

New England Journal of Medicine

March 8, 2012 Vol. 366 No. 10
http://content.nejm.org/current.shtml
[No relevant content]

OMICS: A Journal of Integrative Biology
January/February 2012, 16(1-2): 1-2
http://online.liebertpub.com/toc/omi/16/1-2#
[Reviewed earlier; No relevant content]

The Pediatric Infectious Disease Journal
March 2012 - Volume 31 - Issue 3 pp: 217-286,e52-e58,A11-A12
http://journals.lww.com/pidj/pages/currenttoc.aspx
[Reviewed earlier]

Pediatrics
March 2012, VOLUME 129 / ISSUE 3
http://pediatrics.aappublications.org/current.shtml
[Reviewed last week]

Pharmacoeconomics
March 1, 2012 - Volume 30 - Issue 3 pp: 171-256
http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx
[Reviewed earlier]

PLoS One
[Accessed 10 March 2012]
http://www.plosone.org/article/browse.action;jsessionid=577FD8B9E1F322DAA533C413369CD6F3.ambra01?field=date
US Public Support for Vaccine Donation to Poorer Countries in the 2009 H1N1 Pandemic
Supriya Kumar, Sandra Crouse Quinn, Kevin H. Kim, Karen M. Hilyard
Research Article, published 06 Mar 2012 10.1371/journal.pone.0033025
Abstract
Background
During the 2009 H1N1 pandemic, the global health community sought to make vaccine available "in developing nations in the same timeframe as developed nations." However, richer nations placed advance orders with manufacturers, leaving poorer nations dependent on the quantity and timing of vaccine donations by manufacturers and rich nations. Knowledge of public support for timely donations could be important to policy makers during the next pandemic. We explored what the United States (US) public believes about vaccine donation by its country to poorer countries.
Methods and Findings

We surveyed 2079 US adults between January 22nd and February 1st 2010 about their beliefs regarding vaccine donation to poorer countries. Income ($p = 0.014$), objective priority status ($p = 0.005$), nativity, party affiliation, and political ideology ($p<0.001$) were significantly related to views on the amount of vaccine to be donated. Though party affiliation and political ideology were related to willingness to donate vaccine ($p<0.001$), there was bipartisan support for timely donations of 10% of the US vaccine supply so that those "at risk in poorer countries can get the vaccine at the same time" as those at risk in the US.

Conclusions

We suggest that the US and other developed nations would do well to bolster support with education and public discussion on this issue prior to an emerging pandemic when emotional reactions could potentially influence support for donation. We conclude that given our evidence for bipartisan support for timely donations, it may be necessary to design multiple arguments, from utilitarian to moral, to strengthen public and policy makers' support for donations.

Evaluating Temporal Factors in Combined Interventions of Workforce Shift and School Closure for Mitigating the Spread of Influenza

Tianyou Zhang, Xiuju Fu, Stefan Ma, Gaoxi Xiao, Limsoon Wong, Chee Keong Kwoh, Michael Lees, Gary Kee Khoon Lee, Terence Hung

PLoS ONE: Research Article, published 05 Mar 2012 10.1371/journal.pone.0032203

Abstract

Background

It is believed that combined interventions may be more effective than individual interventions in mitigating epidemic. However there is a lack of quantitative studies on performance of the combination of individual interventions under different temporal settings.

Methodology/Principal Findings

To better understand the problem, we develop an individual-based simulation model running on top of contact networks based on real-life contact data in Singapore. We model and evaluate the spread of influenza epidemic with intervention strategies of workforce shift and its combination with school closure, and examine the impacts of temporal factors, namely the trigger threshold and the duration of an intervention. By comparing simulation results for intervention scenarios with different temporal factors, we find that combined interventions do not always outperform individual interventions and are more effective only when the duration is longer than 6 weeks or school closure is triggered at the 5% threshold; combined interventions may be more effective if school closure starts first when the duration is less than 4 weeks or workforce shift starts first when the duration is longer than 4 weeks.

Conclusions/Significance

We therefore conclude that identifying the appropriate timing configuration is crucial for achieving optimal or near optimal performance in mitigating the spread of influenza epidemic. The results of this study are useful to policy makers in deliberating and planning individual and combined interventions.

PLoS Medicine

(Accessed 10 March 2012)

http://www.plosmedicine.org/article/browse.action?field=date

Guidance for Evidence-Informed Policies about Health Systems: Rationale for and Challenges of Guidance Development
Xavier Bosch-Capblanch, John N. Lavis, Simon Lewin, Rifat Atun, John-Arne Røttingen, Daniel Dröschel, Lise Beck, Edgardo Abalos, Fadi El-Jardali, Lucy Gilson, Sandy Oliver, Kaspar Wyss, Peter Tugwell, Regina Kulier, Tikki Pang, Andy Haines Policy Forum, published 06 Mar 2012
doi:10.1371/journal.pmed.1001185
Summary Points
- Weak health systems hinder the implementation of effective interventions; policies to strengthen such systems need to draw on the best available evidence.
- Health systems evidence is best delivered in the form of guidance embedded in policy formulation processes, but health systems guidance is poorly developed at present.
- The translation of research on problems, interventions, and implementation into decisions and policies that affect how systems are organised is one challenge facing the development of health systems guidance.
- The development of guidance that is timely and usable by the broad range of health systems stakeholders, and of methods to appraise the quality of health systems guidance, are additional challenges.
- Further research is needed to adapt existing approaches (e.g., those used in clinical guidelines) to produce meaningful advice that accounts for the complexity of health systems, political systems, and contexts.
This is the first paper in a three-part series in PLoS Medicine on health systems guidance.

PNAS - Proceedings of the National Academy of Sciences of the United States of America
(Accessed 10 March 2012)
http://www.pnas.org/content/early/recent
[No new relevant content]

Public Health Ethics
Volume 4 Issue 3 November 2011
http://phe.oxfordjournals.org/content/current
Original Articles
Public Health and Public Goods
Jonny Anomaly
Public Health Ethics (2011) 4(3): 251-259 doi:10.1093/phe/phr027
Abstract
It has become increasingly difficult to distinguish public health (and public health ethics) from tangentially related fields like social work. I argue that we should reclaim the more traditional conception of public health as the provision of health-related public goods. The public goods account has the advantage of establishing a relatively clear and distinctive mission for public health. It also allows a consensus of people with different comprehensive moral and political commitments to endorse public health measures, even if they disagree about precisely why they are desirable.

Vaccination Policy and Ethical Challenges Posed by Herd Immunity, Suboptimal Uptake and Subgroup Targeting

Jeroen Luyten, Antoon Vandevelde, Pierre Van Damme, and Philippe Beutels

Public Health Ethics (2011) 4(3): 280-291 doi:10.1093/phe/phr032

Abstract

Vaccination policy is an ethically challenging domain of public policy. It is a matter of collective importance that reaches into the most private sphere of citizens and unavoidably conflicts with individual-based ethics. Policy makers need to walk a tight rope in order to complement utilitarian public health values with individual autonomy rights, protection of privacy, non-discrimination and protection of the worst-off. Whether vaccination is voluntary or compulsory, universal or targeted, every option faces complex ethical hurdles because of the interdependence of humans in infectious disease matters. In this article, we explore the following three policy questions. (i) Ethically, which policy measures should be addressed when vaccination coverage is insufficient in a population? Information campaigns, legal compulsion, or the use of financial incentives can all be effective, but also controversial policy options. (ii) Is it ethical to target vaccination programs at certain risk-groups? If such measures are necessary, we argue that policymakers will often have to decide which is more important to uphold: non-discrimination or the protection of privacy. And (iii), what is the ethical significance of adverse herd immunity effects? Some vaccination programs will improve average population health, but will at the same time increase the risk of severe morbidity and mortality for individuals in the worst-off groups of society.

Advance Monopoly Commitment?

Jorn Sonderholm

Public Health Ethics (2011) 4(3): 297-302 doi:10.1093/phe/phr012

Abstract

This article is a critical discussion of the Advance Market Commitment (AMC) proposal for how to incentivize research and development of drugs for neglected diseases. The main claim of the article is that the 'winner-takes-all' problem that mars a simple prize proposal for how to incentivize research and development of drugs for neglected diseases also tarnishes the AMC proposal. The conclusion of the article is that the AMC proposal should be rejected as an incentivizing scheme for research and development of drugs for neglected diseases. This conclusion follows from the main claim of the article together with two plausible assumptions that are not argued for in the article.

Science

9 March 2012 vol 335, issue 6073, pages 1137-1268

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

News & Analysis

Avian Influenza

Surprising Twist in Debate Over Lab-Made H5N1

Jon Cohen*

For the past several months, the media, the public, scientific groups, and a key U.S. government advisory panel on biosecurity have wrestled with how to deal with two unpublished studies they thought described the creation of a bird flu virus capable of triggering an influenza pandemic with the potential to kill millions of people. Now, a researcher who created one of the H5N1 mutants and a leading U.S. health official are

offering clarifications and "new data" to better gauge the risk it presents. The researcher revealed that the virus made in his lab does not kill ferrets infected by the aerosol route. And it is more difficult to transmit the virus than previously described. These revelations promise to influence—although certainly not end—a contentious debate about whether to publish details about this virus and a second, related one that's less virulent.

Policy Forum

Public Health

Surveillance of Animal Influenza for Pandemic Preparedness

J. S. M. Peiris,
L. L. M. Poon,
and Y. Guan
Science 9 March 2012: 1173-1174.
Published online 16 February 2012 [DOI:10.1126/science.1219936]
The 2009 H1N1 pandemic was not as severe as initially feared. This has led to complacency in some quarters that future pandemics will be of comparable impact and as readily dealt with. However, by September 2009, just 5 months after the recognition of the novel pandemic H1N1 virus, almost 50% of children in Hong Kong were already infected (1), which reflects the speed of spread of the virus to and within international travel hubs. In most parts of the world, vaccines were not available in time to substantially affect the first wave of disease. A more virulent virus, such as one comparable to the 1918 H1N1 virus or the H5N1 "bird flu," spreading with such speed would be a global catastrophe.

Tropical Medicine & International Health
March 2012 Volume 17, Issue 3 Pages 263–403
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-3156/currentissue
[Reviewed earlier]

Vaccine
Volume 30, Issue 13 pp. 2237-2396 (16 March 2012)
http://www.sciencedirect.com/science/journal/0264410X
[Reviewed last week]

Value in Health
Vol 15 | No. 1 | January 2012 | Pages 1-214
http://www.valueinhealthjournal.com/home
[Reviewed earlier]

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